The magazine where the Amiga has always been top.

Amiga User INTERNATIONAL

INCLUDING This TechnoWorld

SIX Stunning Disks Compressed on Two!





THE BEST PRINTER for the Amiga EVER

and it's yours to win!

Picasso IV
DrawStudio
Broadcaster Elite
Amiga PD
Special Roundup
and much more...

MAY 1997 £4.25

LIGHTWAVE 3D

RESISTANCE IS FUTILE

Out of this world, which won't

Picture courtesy of the Magic Camera Co.



amgFX

world FX
t cost the earth

You have probably heard about LightWave 3D, it is after all the 3D animation system chosen by some of the world's leading (and award winning) creative professionals.

You have almost certainly seen some of LightWave 3D's creations in the stunning FX of programmes such as Babylon 5, SeaQuest DSV/2032, Hercules, Robocop, Goldeneye, Cyberjack, The X Files, Space: Above and Beyond, Hypernauts, Star Trek: TNG & Voyager, American Gothic.

You may not know that LightWave 3D costs at least a third less than its nearest rival.

Also available for use with LightWave 3D are the following products: World Construction Set II, Vertilectric, ProWave, In.focus Videos, Wavenet, Particle Storm, WaveFilter Net+, Interchange, Perception and LightWave 3D approved computer systems.

For demonstration or information on LightWave 3D systems call the following:

Orders 0171 468 3452
Enquiries 0171 468 3444
Fax 0171 468 3488

NewTek

amgFX
Part of VTR Group plc

101-109 Ladbroke Grove, London W11 1PG
AMGFX are the only official UK distributors of LightWave 3D.

MAY 1997 Vol.11 No.5

Amiga User INTERNATIONAL

CONSTANT FACTORS

5 The Amiga Dimension
Managing Editor Antony Jacobson comments on astonishing stupidity and irresponsibility of those in whose hands the fate of the Amiga rests.

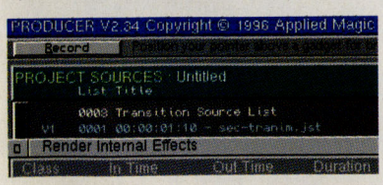
8 SuperDisks No.105 & No.106
This month, while camped at the South pole for a "chilling out" experience, Zahid Rafiq tells us about the gems on the disks.

14 NewsFile
Anthony Mael, Martin Anthony Mael, Martin Witton, and David Ward have trawled the murky waters to harvest the fishy stories that float the sewers and local inlets down which tubes have gone the many events and companies in this underworld of computing.

68 Amiga Answers
Once again *AUI*s Guru of the Technowaves, Andy Eskelson, confronts the problems and the puzzlement of Amiga users around the world.

80 The PD Stakeout
David Ward names the better PD in recent times. If you don't have at least some of these programs in your collection, then you should be ashamed of yourself.

86 Write to Reply
Bud Vennos, quick with a quip and quicker with the quizzing quote, questions the quantity and quality of the queries that have queerly quashed his quasi quintessentialness.



TEST DRIVE

28 Painting Up A Storm
Millions of colours and resolutions up to 1600 by 1200; Stephen Mangram test drives Picasso IV, the latest and greatest Zorro graphic board from VillageTronic.



32 Supreme Studio
Three for one and none for free: the Dean brothers go commercial. David Ward tries out a CD-ROM with a lot to offer.

38 Prime Philips
John Russell is quite taken with the Philips VR665, a highly specified low-priced video recorder.

44 Kyo Who?
John Russell test drives an LED printer from a manufacturer who should be better known by Amiga users.

62 CD Round Up
Shelley Hannan joins David Ward at the turntables to review the latest imports from Germany and a home-grown reference work.

FIELD REPORT

36 Up With The Elite
Amiga videographer Chris Bates is one of the few expert at using Broadcaster Elite in the UK. David Ward interviews him on how this program helped him make the jump into a new profession.

40 Power to the Amiga
One of the best-known names in the Amiga business is celebrating its tenth anniversary. Ashley Cotter-Cairns went to discover its history and find out what the future holds.

42 A Tale of two Amigans
Steve Bowie goes back to school before voyaging to the bottom of the sea to see how Amigas are working the real world.

USER PORT

60 Painting the Web
Graphic artist Shelley Hannan tells us how you can jazz up Web page design using Personal Paint 7's new features.



MENTOR

64 ARexx Info: Making A Start
This month Paul Overaa gives beginners the perfect chance to find out what ARexx programming is all about.

65 Cracking the Shell: Recoverable RAMdrive
Kevin Bryan explains how to get into non-volatile RAM.

66 Programming Tips: Sorting HiSoft Basic and Gadtools
Paul Overaa describes the tricks required to make the combination work.

72 Toolbox
Andy Eskelson provides some tips on enhancements and explains how to deal with that old problem, printing.

HARDCOPY

48 Get Smart, Stay Smart
Antony Jacobson reviews a book that seeks to reveal the secrets of the world's top software company.

ENTERTAINMENT NOW

82 Entertainment Now!
David Ward joins Mark Forbes at the controls of the latest Amiga entertainments.

COMPETITIONS

66 Win The Kyocera FS-400 Printer
AUI and Kyocera have got together to offer you the chance to win this superb LED printer, possibly the best to which the Amiga has ever been connected.

AUI SERVICES

71 Subscribe!
Don't miss out on your next copy of *AUI* commands Subscription Boss Sarah-Jane Clifford-Jones, cracking her black leather whip.

72 Back Issues
So your local newsagent has sold out of copies of *AUI*. You should have subscribed, but don't worry, for £6 we may be able to send you the issue you missed.

92 Arena
In the Arena section you will find a large number of eager companies wishing to show off their wares, both hard and soft. Peruse and choose.

This TechnoWorld

50 Technology Today
Anthony Mael and Martin Witton explore the technotruth out there.



56 The Online Column
Anthony Mael splashes back into the flooding stream of bits they call the Internet.

56 Chips That Made History Part 9 Processors of the Future
Simon Goodwin explains, in the final article of the series, some near-misses of the past and makes predictions for the future of the microprocessor.

SPECIAL REPORT

57 Late Breaking News
We have received, as we go to press, some information on the Amiga that you may like to have. This seems to happen every month these days. We trust that we won't have to do this again!

98 Save me a copy of *AUI*, Mr. Newsagent!
If you haven't been able to find *AUI*, here are the places to try. How to be sure that you will get your magazine at your local newsagent - the better places are those that stock *AUI*!

Who Does What

Managing Editor and Publisher: Antony Jacobson

Deputy Editor: David Ward

Contributors: Steve Bowie, Kevin Bryan, Ashley Cotter-Cairns, Andy Eskelson, Mark Forbes, Simon Goodwin, Shelley Hannan, Anthony Mael, Stephen Mangram, Paul Overaa, Zahid Rafiq, John Russell, Imdad Shah, Bud Vennos, and Martin Witton.

Design: Gareth Chisholm, Graham Baldock.

Advertisement Manager: Nick Martin
Marketing and Subscriptions Manager: Sarah-Jane Clifford-Jones

Copyright ***AUI*** Limited

Editorial & Advertising: Amiga User International, Unit 2, Utopia Village, 7 Chalcot Road, London NW1 8LX
Telephone: 0171 586 7717
Fax: 0171 483 1774
Email: ***aui***@bigfoot.com
URL: http://www.demon.co.uk/***aui***mag

Subscriptions Address: ***AUI*** Subscriptions Department, Customer Interface, Bradley Pavilions, Peartree Road, Bradley Stoke, Bristol BS12 0BQ Tel. 01454 620070 Fax: 01454 620080

Published by ***AUI*** Limited

Origination and Colour Reproduction: Ford Graphics, Ringwood, Hants.

...And What They Used

Commodore's CD32, A1200, A2000, A3000, and A4000 Amiga computers with their 1084, 1942, and 1960 monitors. Microvitec's 1701, NEC's Multisync 4F, and Samsung's 17GLsi monitors. GVP's A530 Turbo accelerator, HiQ's 1500, SyQuest's EZ135, and Macro-Systems VLab hardware. Progressive Peripheral's DiskMaster. Arnor's Protext, Micro-Systems' Scribble!, and Digita's Wordworth word-processors. ASDG's Art Department Professional, Electronic Art's Deluxe Paint, and Cloanto's Personal Paint graphics software. Psion's Surfer modem, Termite, IBrowse, and HiSoft's Net&Web for the online world. Plus a whole lot more...

Distributed by COMAG Ltd.

Amiga User International - an independent magazine for Amiga computer users - is not connected in any way with Amiga Technologies or Viscorp Inc. It is published 12 times per year on the first Thursday of the month. The publishers do not accept any liability for any incorrect statement or errors contained in material that may be produced from time to time.

Printed in the U.K.

The Amiga Dimension

The last page that is created in this ***AUI,*** apart from the page containing this Amiga Dimension, carries some late Amiga news. On it there are two "statements". One is by the head of what is left of Amiga Technologies and the other from Carl Sassenrath, a longtime Amiga expert. The first, after a gap of months, provides virtually no information and nothing to relieve the worries of the Amiga community. The second is a report of Carl Sassenrath's individual efforts to create a new operating system and language for what might be the successor to the Amiga.

Carl Sassenrath may be forgiven for cutting out his own path to a different computer future though whether he will be successful is a matter of doubt. And does the world really need another programming language? But the other statement is, in my view, very representative of the irresponsibility of those who have driven the Amiga to a state where a writer on another Amiga magazine sends a message to the Write to Reply column describing the Amiga as having "died and started to stagnate". Petro Tyschtschenko who has been in charge of Amiga Technologies since Escom took over the Amiga, apparently feels, from the tone of his statement, quite satisfied with the situation of selling off a few of the remaining Amigas to Russia and Malaysia. He mentions the "Trustee" and implies that this person is carrying out useful functions. One such function is probably the payment to the staff of Amiga Technologies. The only other information provided is that VISCorp is no longer among the bidders for the Amiga. Big deal, everyone knew that months ago.

According to the information we had reported in last month's ***AUI***, the result of the auction for the Amiga was to be announced immediately after February 28th when the German liquidator, whom we assume is this mysterious "trustee", would have chosen the winner. Now many weeks later no such result has been announced. The situation is as before, as they used to say "SNAFU", situation normal, all fouled up - only "fouled "was usually less politely expressed.

Who has brought it to this absurdity? You can trace it back to Commodore - now to be revived. (See NewsFile). But that happened so long ago that it would be foolish to ascribe much blame there. Since then Escom and Amiga Technologies - and the German Liquidator (Trustee?) - have played their disastrous roles.

Frankly I think that the Amiga may now have been damaged beyond repair by the irresponsibility of these people. They must have no conception of what goes on in the computer world with technological advances made every day and the Amiga being left behind. For the Amiga to have been able to continue in a real and important role it needed urgent, decisive action, not self-satisfied paralysis.

There abound stories of liquidators - of any nationality - keeping their "trusteeships" in being until, at so much per hour, they have sucked the life out of companies, and there is nothing left for creditors. In this case the sheer stupidity of failing to make decisions months back to settle the fate of the Amiga have led to more than that. It is not only the creditors who are suffering but the Amiga itself has lost and continues to lose value with every day that is torn off the calendar.

That there should be companies who still want to buy the remains of the computer is no surprise. Some will want to pick up the machines lying in the warehouses and flog them off cheap for a quick profit. Others who have benefited from the Amiga over the years may hope there is still a market for it if they can pay a low enough price. In an interview with a company still selling Amiga kit in the UK, in this issue, it emerges that this company previously was involved with Sinclair's QL. That was, like the Amiga, a good machine. It horrifies me but it is no exaggeration today to compare the Amiga situation with what happened to the QL.

These stupid people have brought the Amiga to this condition. They have sat and watched, and drawn their salaries, while its position weakened and value fell. They have failed to carry out what they said they would do, find a buyer, even if that buyer were not ideal. In delaying to this extent they have done more damage than even an unsuitable buyer would have done. They have effectively defrauded the whole Amiga community.

The Amiga is just a computer but to many of us it had a special significance, it was the path into a new dimension. The Amiga Dimension is something I have written about many times. Only the most optimistic and some would say, unrealistic among the Amiga community can now believe that the Amiga Dimension can survive what these fools and selfseekers have done to it.

Antony H.Jacobson
Managing Editor and Publisher

Weird Science

Weird Science Ltd. 1 Rowlandson Close, Leicester, Leicestershire. LE4 2SE
Tel. +44 (0)116 234 0682 Fax. +44 (0)116 235 0045
email. sales@weirdscience.co.uk or tech@weirdscience.co.uk

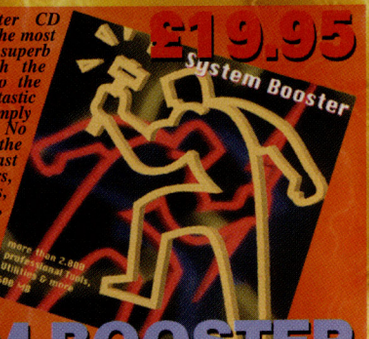
NEW WWW SITE NOW OPEN AT www.weirdscience.co.uk

£34.99 AMINET SET 3 or 4



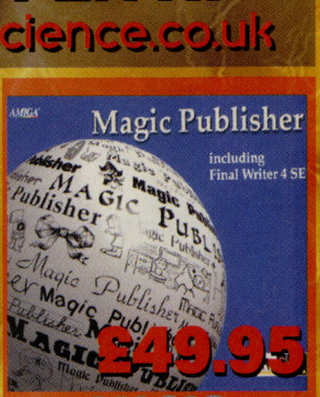
Aminet Set 4, dated January 1997, consists of 4 gigabytes of software in 9,000 archives. Including the full versions of Directory Opus 5.11. With 95 megs Utilities, 79 megs Documents, 408 megs Text Software, 12 megs Disk/HD Tools, 7 megs Hardware related, 756 megs Pictures & Animations, 208 megs Graphics software, 394 megs Graphics & Sound Demos, 563 megs Games, 685 megs Music modules, 28 megs Music software, 131 megs Communications and more. Aminet Set 3, dated July 1996, consists of 4 gigabytes of software in 9,000 archives. Including the full versions of Imagine 4.0, XiPaint 3.2, Octamed 5.0.

£19.95 SYSTEM BOOSTER



The Amiga System Booster CD enables users to really make the most of their computers with a superb collection of tools to push the capabilities of the Amiga to the limits. Nearly all the fantastic utilities can be started by simply direct from the compact disc. No de-archiving required. The the contents include a vast collection of screen blankers, mouse tools & commodities, backup, file management, cache programs to optimise system performance, data recovery, CD-ROM utilities, virus killers and a whole host more. This CD-ROM prapvides for beginners and professionals.

£49.95 MAGIC PUBLISHER



Magic Publisher comprises of four compact discs and on this unique CD-ROM set you will find all you need to create professional looking documents. There are more than 10,000 Fonts (Colour Fonts, Bitmap, IFF, Adobe, Intellifonts, Truetype & DMF), more than 5,000 clipart. Many of these are exclusive to this compact disc. Full commercial versions of Final Writer 4 SE and Wordworth 4 TD are included. Both rated as great word processors on the Amiga. Tools for creating WWW pages along with backgrounds and special clip art for this purpose is also included. A 100 page booklet containing printouts of all the fonts and clipart.

£19.95 AMINET SET 1 OR AMINET SET 2



NEW LOWER PRICE

Aminet Set 1 or 2, consist of 4 gigabytes of software in 12,000 archives. The software is on four compact discs. With Utilities, Documents, Text Software, Disk/HD Tools, Hardware related, Pictures & Animations, Graphics software, Graphics & Sound Demos, Games, Music modules, Music software, Communications, Amiga Development software, Business software and more. All of the archives are easily accessible with a simple Index menu system with search.

£14.99 AMIGA DEVELOPERS CD



The Amiga Developers CD from Amiga Technologies comes complete with the all the developers tools and docs. provided to the official developers. Included are the complete CD32 developers tools with Build CD and ISO CD, Envoy 2.0 package, Enforcer, Workbench 2.0, 3.0, 3.1 tools and documents with the updated native developers kit, SANA II package and the installer package. Also included is a vast amount of info. A must for Amiga enthusiasts.

£29.95 MODS ANTHOLOGY



A collection 18,000 music modules arranged of four compact discs all sorted by composer, groups and type. All stored ready to use from the compact discs. Provided with 11 megs of Module lists and 25 megs of module players for many different computer platforms. This 7 years titanic work provides over a 1,000 hours of music enjoyment along with information on may of the composers whose work is featured.

£19.95 GEEK GADGETS



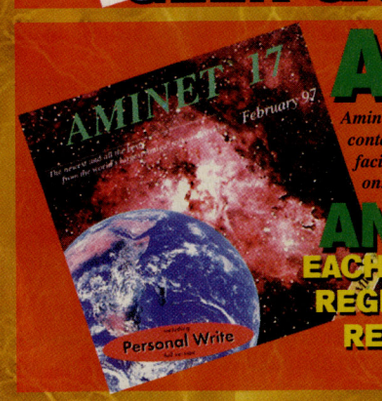
Geek Gadgets contains virtually all of the tools you need to get started programming on the Amiga, including advanced C, C++, Fortran and ADA compilers, assembler, linker, EMACS editor, "make", source code control systems (rcs & cvs), text and file utilities, GNU debugger, text formatters (groff & TeX), and much more. Everything comes with complete source code and all binaries have been compiled from the supplied sources. All tools on the Geek Gadgets CD can be run directly from the CD-ROM, without the need to install any files on to your Hard Drive.

£49.95 AMIGA REPAIR KIT



The Amiga Repait Kit CD comes complete with the all with all the tools required to backup and rescue your precious data on hard drives. Disk Salve 4 will rescue and restore most damaged, corrupt and even deleted files from floppies, hard disks etc. During the process it will attempt to fix all problems caused by software failures or physical damage. RDB-Salve 1.1 is a superb program that will allow you to restore your valuable data even if the Rigid Disk Block has been destroyed or over written. Recovery can recover files from normal or corrupted disks. Essential Amiga Tools.

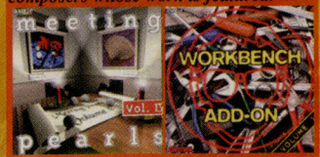
£14.99 AMINET CDs



Aminet, the worlds largest Amiga archive, provides compact discs of the sites latest software uploads. Each volume contains about 1.1 gigs of archives with a superb menu system for un-archiving the files and a simple search facility to help you find exactly the file required. The search facility will even list the compact disc that the file is on. Aminet 18 is available in April and Aminet CDs 13, 14, 15, 16 are still available at £14.99.

AMINET CD SUBSCRIPTIONS

EACH AMINET CD FOR ONLY £ 9.99 UPON RELEASE BY JUST REGISTERING FOR A SUBSCRIPTION. AS EACH NEW CD IS RELEASED WE WILL CHARGE YOU AND DISPATCH YOUR NEW AMINET CD ON THE DAY OF UK RELEASE.



Meeting Pearls 4 (Software Collection) £ 8.95	Workbench Add-on CD (Utilties) £ 24.95



Giga Graphics Four CD-ROMs Image Collection £ 19.95	Xi-Paint v. 4.0 24 Bit Image Manipulation £ 49.95

SEE US AT THE WORLD OF AMIGA SHOW IN MAY

SCHATZTRUHE

International Distributor:

GTI

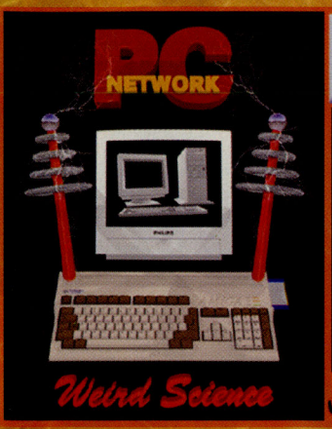
GTI
Grenville Trading International GmbH
Carl-Zeiss-Str. 9
79761 Waldshut-Tiengen. Germany
Tel. +49 7741 83040
Fax +49 7741 830438
Email: amiga@gtigermany.com

£11.99 EURO CD VOL. 1



The Euro CD contains a vast variety of programs and data for the Amiga in the Aminet mould. However this CD differentiates itself by have the contents ready to run without de-archiving. The contents include Animations 36 megs, Commercial 21 megs, Demo's 65 megs, Disk tools 12 megs, Fonts 12 megs, Games 57 megs, Misc. 6 megs, Modules 110 megs, Music 21 megs, Objects 12 megs, Pictures 118 megs, Presentations 23 megs, Printer 1 meg, Programs 23 megs, Samples 4 megs, System 10 megs, Text files 26 megs, Utilities 16 megs and Vidules 3 megs. Full English docs. and menus.

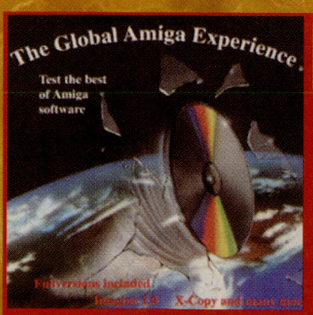
NETWORK PC



Provides a filesystem for accessing your PC drives from the Amiga. Our system will provide any WB program with access to any of your PC drives, including CD, Zip, Jazz and fixed hard drives. The PC acts as slave machine and can therefore not access the Amiga, however our kit contains all you need to access a PC from an Amiga. Simple installation on both machines. The system is WB 2.04+ and Win95 compatible and the PC can perform other tasks simultaneously.

Access all of the PC drives.
Read & Write to & from the PC.
Load files directly from the PC.
Up to 45k/sec for Amiga > PC.
Up to 29k/sec for PC > Amiga.

Join a PC to your Amiga via the parallel port **£19.95**



FREE WITH ALL ORDERS OVER £ 25.00

GLOBAL AMIGA EXPERIENCE
(OVER 200 DEMONSTRATIONS OF FULL COMMERCIAL PROGRAMS AND 7 FULL VERSIONS)

PLEASE ASK FOR THE FREE CD OR IT WILL NOT BE SHIPPED

INTERNET ACCESS THE EASY WAY



Weird Science is the Official UK Registration Site for Miami

In-To-the-Net CD provides a pleasant introduction and connection to the internet. Most of the difficult setting up is done automatically for you with the connection program provided. All that is required is the answers to a few simple questions. In addition the CD contains all the tools required for both the beginner and expert, full instructions on getting connected and many very helpful documents on the Internet and WWW. The tools include AmiTCP, Mail, FTP, WWW and many more. In addition there is a section on WWW page creation with clip art and creation tools. Easy Hard Drive installation possible but not required.

MIAMI REGISTRATION **£29.95**

FULL VERSION **IBROWSE**



iBrowse 1.1 now including support for FRAMES and many more HTML 3 tags. iBrowse is surely unbeatable and with a fantastic price from Weird Science. View the Web the way it was meant to be.

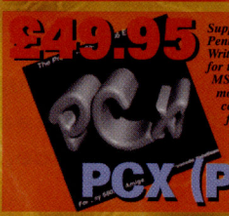


£24.95

IN-TO-THE-NET £14.99
INCLUDES OUT-OF-THE-NET



£49.95



PCX (PC EMULATOR)

Supports extensive hardware level emulation of the Intel Pentium Processor. FPU supported if the Amiga has an FPU. Written by the leaders in x86 emulation technology, responsible for the world's first Intel Pentium emulation. Compatible with MS-DOS through to version 7.0, Windows 3.1/3.11, protected mode as used by Doom and DarkForces etc. Memory Manger compatible (EMM386) and compatible with PC hask hard files. The quick start function feature no BIOS required, auto configuring, on disk Amiga Guide documentation. Just requires MSDOS and Windows software to run.

£39.95



SECAL Programming Language

The Secal programming language for the Amiga combines the advantages of both assembly and other high level languages. A unique feature of the Secal language is the way in which it integrates the elements of processor-level programming and high level statements. All this, together with the clean syntax make it possible to write compact and fast code - easier than in assembler. All of the important parts of the development procedure (editing, compiling-linking, debugging etc.) can be done in one single environment. Additionally Secal command line work and batch scripts.

£19.95



A CD FOR ALL AGES

A MAGICAL JOURNEY THROUGH EXCITING DIVERSE SUBJECTS

THE LEARNING CURVE

The Learning Curve CD presents a fantastic and magical journey through exciting subjects brought together for the first time on an Amiga CD. Containing over 32,000 files this title will delight and interest both young and old with the vast diversity and quantity of Amiga Educational and Informational programs featured. All of the programs can be run directly from the compact disc with no unarchiving on any Amiga. (Workbench 2.04+.) Encyclopedias have been scarce for the Amiga and educational compact discs have been virtually non-existent, well now you have a unique CD providing productive entertainment for all ages. *Just a few of the categories.*

Aircraft	Educational	Religion
Art	Fairy Tales	Science
Computer	Mathematics	Astronomy
Desktop Utils	Spelling	Biology
Electronics	Languages	Books
Engineering	Literature	Chemistry
Geography	Drama	Ecology
Health	Music	Geology
History	Mythology	
Hobbies	Philosophy	

£19.95



ASSASSINS CD VOL. 3

The tradition continues with the release of the latest Assassins Ultimate Games CD Vol. 3. Over 500 new games and an all new and enhanced menu system for the selection of the great games contained on the compact disc. All of the games are ready to run directly from the menu system. This menu system has received accolades from amongst the Amiga Press on the previous two compact discs, both of which have received Amiga Format Gold awards. The menu provides access to all of the games, brief instructions, requirements, access to instructions & also the game itself. All of the games are new and original and have not appeared on either of the previous two compact discs. All games playable direct from the CD

£9.99



SOUNDSTUDIO

SoundStudio has arrived. With fabulous new features including full mixing facilities, save modules as samples, notation editor (with printing), 64 channels, new midi commands, more Toccata support, no sample size limits, fastmem facility and more. SoundStudio has lifted Amiga music creation to new heights . A must for all musicians.

£19.95



SOUNDS TERRIFIC 2

The music and sounds files can be auditioned from an easy to use interface for both a PC & Amiga. Included are 4,400+ modules, 400 extra large modules (over 300k each,) 795 Screamtracker modules, 1,000+ categorised midi files, 4240 IFF samples, 620 categorised WAV samples, 1,000+ Walkabout Instrument samples in WAV & IFF formats, 100's of utilities for Amiga and as a bonus the complete MidiCraft collection of Midi files. Now includes Octamed 6 CD FREE.

£9.99



AGA TOOLKIT '97

From Weird Science comes a superb Workbench 3.0+ Utilities CD with the very best utilities presented ready to run directly from the CD. No installation necessary. The compact disc is presented with both 'New Icons' and 'Magic Workbench' icons and an assign sequence that enables either at the choice of the user also sets it up ready for the utilities to run directly. The contents have been indexed with a description of all the fully categorised utilities available. Any of the utilities can be launched from the guide directly. The categories include Graphics, Disk Utils., Operating System, Emulation, Workbench, Music, Business, Communication, Performance, Text, Programming and more.

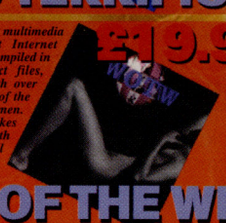
£14.99



NETWORK CD 2

The very best in CD32 and Amiga Networking has just got so much better. This CD is an absolute must have for all Network CD owners. The concept and operation has been improved in every possible way. The CD32 boots in about 45 seconds, with more memory available and fake fast ram to improve speed. One button press on the Amiga can set-up any program to run on both machines, including the entire Sernet set-up at the speed of your choice on both machines. No more difficult set-up routines. Sernet now runs at various speeds and is now the fastest ever. A keyboard and mouse can be emulated on the CD32. Twin Express can now be controlled from DOpus. Serlink allows easy downloading of data. Plus so much more. The best way to join a CD32 to an Amiga

£19.95



WOMEN OF THE WEB

Women of the Web is an exciting new multimedia experience bringing all the latest Internet technology to the home. This title is compiled in HTML format, using pictures, text files, animations and sound samples. With over 450 megs of information on over 250 of the world's most beautiful and famous women. The easy point and click interface makes the whole CD-ROM accessible to both beginners and experts alike. With full colour images and video this compact disc is sure to please.

1,078 Weird Textures
3,000 Jpeg Textures
Dem Rom
Magic Workbench Enhancer
NFA Utilities Experience
NFA AGA Experience 2
Scene Storm
Zoom 2
Oh Yes! More Worms
Octamed 6
Clip Art CD
3DCD-1 Objects
3DCD-2 Images
Retro Gold

ALL ONLY $ 9.99

£29.95



KARA COLLECTION

Includes all the packages previously published by Kara Computer Graphics for the Amiga, plus many more, in an exclusive and professional edition reorganised and enhanced by Cloanto. This CD-ROM contains 80 ColorFonts, 5 AnimFonts, hundreds of alternate colour palettes, Starfields, Plaquegrounds, and software for special effects in pictures, animations, titling and presentations. All items for sale recombined way. The Kara Collection also includes two software packages developed by Cloanto to manage bitmapped fonts: ColorType for colour fonts and the Personal Fonts Maker for black and white fonts. Both have been acclaimed as the best in their respective fields. To make AnimFonts really easy and enjoyable to use. A fabulous collection of Anim Fonts.

£29.95



PERSONAL PAINT 7

After more than a year of hard work, we are proud to announce the release of Personal Paint 7. This version has more than 100 new features, including:

- *New and improved file formats, including Photo CD , GIF, BMP, JPEG, 24-bit DataTypes and PBM*
- *Professional Internet features like GIF animations.*
- *Enhanced user interface.*
- *180 ARexx commands, with scripts directly accessible from the toolbar*
- *New "plug-in" library system.*
- *Automatically create directory thumbnails.*

And much, much more

Card Games CD
17 Bit LSD CD 3
17 Bit 5th Dimension
Amos PD CD
UPD Gold
Imagine PD CD
Multimedia Backdrops
Sci Fi Sensations 2
Assassins CD Volume 2

ALL ONLY $ 14.99

£14.99



LIGHT ROM GOLD

The very best from Light Rom 1, 2 and 3 with over 6,000 Lightwave objects and scene files. Light Rom Gold was created for those who did not purchase Light Rom 3. The material on Light Rom Gold is compatible with all versions of Lightwave on all platforms. This material is presented using the content directory method for all users of Lightwave 4.0 and higher. All of the Lightwave objects and scene files are represented with thumbnail renderings for easy previewing.

£14.99



PERSONAL SUITE CD

This CD-ROM includes Personal Paint 6.4 and Personal Write 4.1 from Cloanto, SBase 4 Personal (from Oxxi), Personal Fonts Maker 1 & 2 (Cloanto), 27 professional colour fonts, Cloanto's DirDiff (file synchronization and replication software) and PNG Toolkit, plus ½ Gbyte of pictures, animations, stereograms, stereogram animations, Amiga fonts, printer downloadable fonts and texts. The CD-ROM contains no public domain or shareware software. The commercial titles include full manuals in AmigaGuide format (English and German, with some titles also in French and Italian).

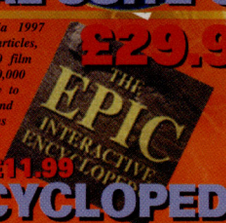
£19.95



Light Rom 4, a 2 CD-ROM set for the Amiga, Mac, Windows / NT features all new Lightwave objects and scene files. In addition there is a bonus CD-ROM of 3,000 Jpeg Textures, see below. LIGHT-ROM 4 also includes a collection scene files by Alan Chan. This set contains wholly new material and is an absolutely superb resource for Lightwave. Four features new royalty free material created with Lightwave 4.0 & 5.0 versions.

LIGHT ROM 4

£29.95



EPIC ENCYCLOPEDIA

The Epic Interactive Encyclopedia 1997 Edition now includes over 16,000 articles, 4,000 images, 200 sound clips, 200 film clips, 3 search engines, over 1,000,000 words, national anthems, the ability to create your own articles, guided tour and much more. The latest version contains at least four times as much information as it's predecessor.

UPGRADE FOR £11.99

TELEPHONE ORDER HOTLINE
+44 (0)116 234 0682

UK POSTAGE IS £1.00 FOR THE FIRST ITEM AND 50p EACH EXTRA ITEM, OVERSEAS IS DOUBLE.

WE WILL PRICE MATCH ANY ADVERT IN THIS MAGAZINE

Amiga User International
SuperDisks No.105 & 106

SuperDisks No.105 & 106

Once again the quest for supremacy has been attempted by Imdad Shah and his self-sacrificing SuperDisk team. This month, while camped at the South Pole for a "chilling out" experience, Zahid Rafiq tells us about the gems on the disks.

The Great *AUI* Utilities Disk No.1
AUIMay97c

FastDecode

FastDecode is a UU-decoding utility for email users. There are quite a lot of these programs around but this one is a bit special. This decoder features faster decoding, decoding of split files without the need to join them (so no glue required here), and the decoding of many files at once. A humdinger.

ShutDown

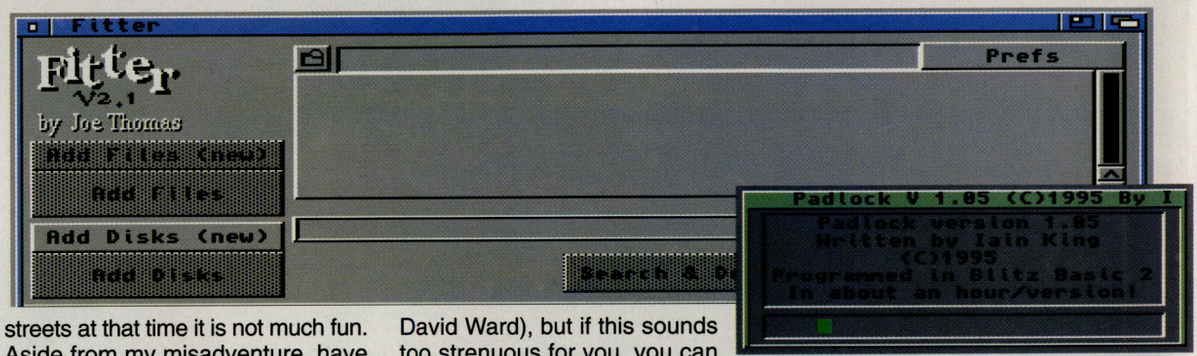
ShutDown is just like Windoze95 equivalent, but for the Amiga. The program tells you when it is safe to turn off your computer which is always a useful chunk of knowledge to have.

FindCrunch

This utility is useful as it enables the user (which is you) to search for crunched data inside a file. FindCrunch does this with a little help from the master of all crunchmasters, the XfdMaster library. When a piece of compressed code is found, you can save it out or decrunch and save it. Thank FindCrunch, it's found it.

LockOut

This happens to me at about 4:33.43 a.m. (Time sponsored by my watch). When I go home I find myself locked out and wandering the streets at that time it is not much fun. Aside from my misadventure, have you ever wanted to lock those certain files that you don't want anyone to access other than you (or your pet cat)? If this is the case, then use LockOut. Put it in your user-startup file or WBstartup drawer to prevent others from accessing your plans for the new Amiga or world domination, whichever is the easier. Is that your new Amiga? Perhaps world domination would be a better bet.



StartupManager

Want to know what is loading in to your Amiga's RAM at startup? Today is your lucky day. By using StartupManager you can manage anything from changing your socks to heading a team of rocket scientists (the latter holds no real truth however). StartupManager will also provide an easy means of turning off all programs in the startup path (or pavement).

Fitter

You can become fitter by running around your local park several times or even by doing exercise (hint, hint, David Ward), but if this sounds too strenuous for you, you can simply use this utility which makes sure that you fit as much data onto a floppy as humanly or mechanically possible without wasting any space. (What a relief! - No more exercise for a while...).

Lens

Lens is a magnifying program for Workbench and other such screens. What Lens does is it magnifies at whatever the mouse is pointing. It then displays it in another window. You can specify the dimensions which you require and also zoom in and out. And how many dimensions do you have in your world? However many, Lens lets you specify them.

The Great *AUI* Utilities Disk No.2
AUIMay97d

Padlock

You are a rocket scientist and are working on a new wonder rocket fuel which contains secret ingredients such as... We can't divulge it or it would not be a secret! You do not want anyone to see this very confidential data so what can you do?

Simple is the key to this question. It is also a word of five letters. By using Padlock you can lock the Workbench at a touch of a button (or should that be a press of a key?), but the best thing about Padlock is that background tasks will still run. Make sure they do not run too far though.

Shell

Within this drawer you will find Kevin Bryan's RADical script to accompany this month's 'Cracking the Shell' tutorial on page 65.

Programming

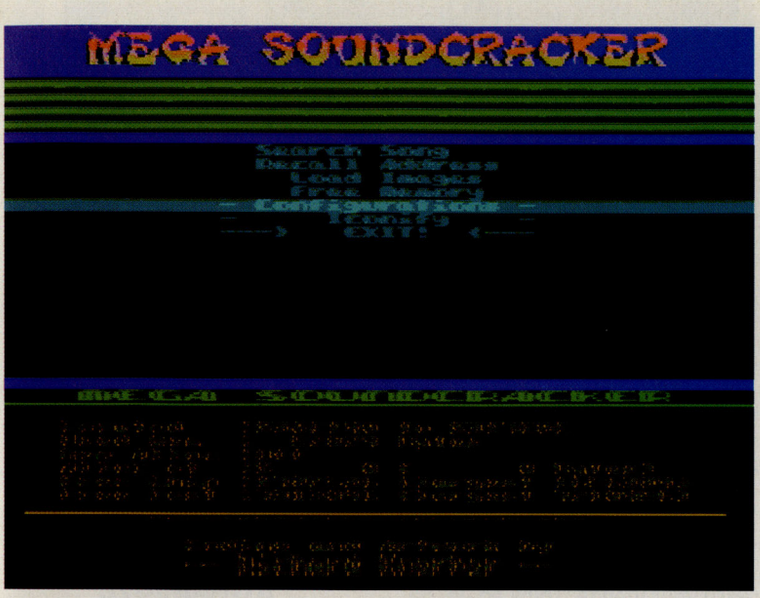
This drawer contains the examples that accompany Paul Overaa's tutorial for this month's 'Programming Tips' on page 66.

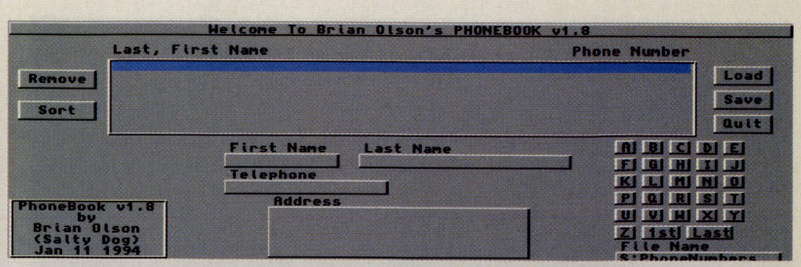
Rdel

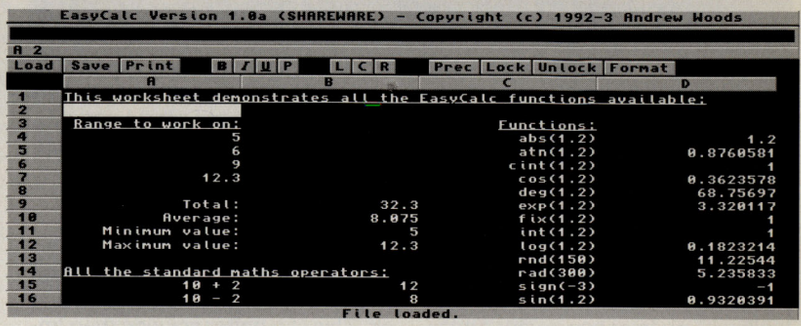
Rdel recursively scans a directory (or a list of directories) for files which match a given AmigaDOS pattern. Files are deleted and/or displayed in the current CLI window.

Warning: This utility was designed to delete files. So keep that in mind when messing about with rdel. Our resident file deleting expert, Terry Wilson, recommends it. He had an extensive report on this utility writ-









ten for us, but deleted it in his usual confusion.

SoundCracker

SoundCracker is a ripper (just as Jack was) in reality, but is also marvellous for playing modules. It has too a lot of other useful features which Jack would not have allowed us to reveal.

PIXX Master

PIXX Master is an art program. It is slightly different from the average art program. It has twenty tools, thirty-two colours and sixteen block spaces and is entirely mouse and keyboard controlled... except the 'Etch-a-Sketch' mode, which uses the joystick. Quite Good.

Predictor

Want to win the Pools? Then use Predictor with its handy football results database. Don't forget, if you win send 10% to the SuperDisk Costa Rican Holiday Fund.

The Great *AUI* Utilities Disk No.3
AUIMay97e

CloudsAGA

Picture a sunny day when all is going well, the vinyl is sticking and then it starts to pour down. What do you do? Run home and just view the fluffy white clouds using your Amiga.

This program randomly creates clouds on your screen. You can then save them as IFF files and use them as textures, backgrounds, or for any reason you deem feasible. Or not, as the case may be, or may be the case just in case you did not know. After using you can sing "I've looked at clouds from both sides now." And pretend you are Joni Mitchell.

WBPI

WBPI allows you to change the colour of your windows, drawers, or anything on your Workbench screen. (You can even choose pink... ooooh!! Tickle me pink)

TinyMeter

TinyMeter might be a useful utility but it is in no way tiny as the name suggests. This utility sits on the Workbench and shows the memory usage, volume usage, date, and time. Therefore, no excuses for loading files bigger than the available memory and complaining about it. (This is version 3.51, so users of v1.1, as found on SuperDisks 91/92, can update).

PhoneBook

Do you have one of those little black books laying around the bedroom with all those private telephone numbers? If so quickly go and grab it (what do you mean you can't find it?). If you had used PhoneBook you would not have had that problem. With PhoneBook you can store all those personal details with greater privacy and without losing them. (Unless you suffer from hard disk failure, Imdad).

Splitit!

Occasionally you will have a file that you need to transfer to another Amiga, but it may be too large to fit on a single floppy. You tried compressing it, but to no avail, it is still bigger than 1Mb. This is where SplitIt! comes into its own. By using this program you can split the file into parts that easily fit onto floppies. You can then stick them back together again on the other Amiga.

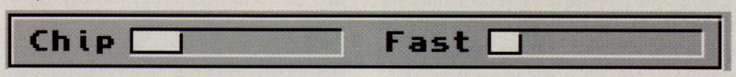
The Great *AUI* Utilities Disk No.4
AUIMay97f

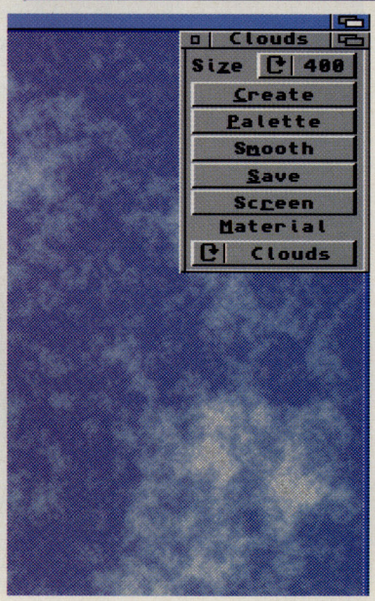
BlizzRepair

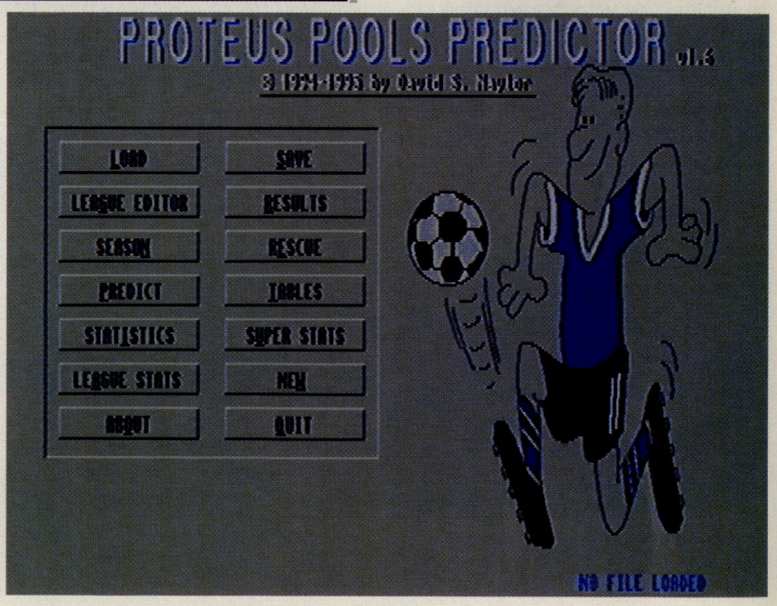
A bug fix for the Blizzard 1220 board. If you have noticed that every time you hard reset your machine your fast memory has given up the ghost, fear not. This little utility should fix your memory problem (if you have any). And the spectre should return once again.

EasyCalc

Here is a spreadsheet program for all. For those of you who are thinking what you should not, it has nothing to do with the sheets on your bed. Those are only fun when working undercover. This spreadsheet can give









you the chance to calculate just what you can do with the "What ifs" of finance even if you are not rich - yet. EasyCalc is a very good, simple to use, and most useful Spreadsheet.

Easylink

Easylink makes the impossible possible, or the unwanted wanted. It allows you to connect your Amiga to your friend's PC (because we know faithful Amiga owners are sensible enough not to own PCs) via a null modem-cable. It is then possible to exchange data between a machine with extremely efficient electronics and the other that contains a mish-mash of mucked about circuits. You know which is which, don't you?

Indices

Every month we diligently update the indices to past *AUI* magazines, SuperDisks, and SuperCDs so that they are presented here for you to read in an easy manner. "Peruse and choose" as the great old one says, then order a back number using the colourful form on page 72.

Lottery

If mysterious ethereal voices have not been whispering "It's you" in your ear, then we can give you a helping hand with your luck this month by supplying you with this amazing utility. You could become a millionaire by using this program and you could then treat the whole of the *AUI* team (except David Ward, as he now has complete control of the Tokyo stock market and has no time for your contributions) to something expensive. Lottery is a random number generator for numbers between 1 and 49... which is what Lottery machines are anyway.

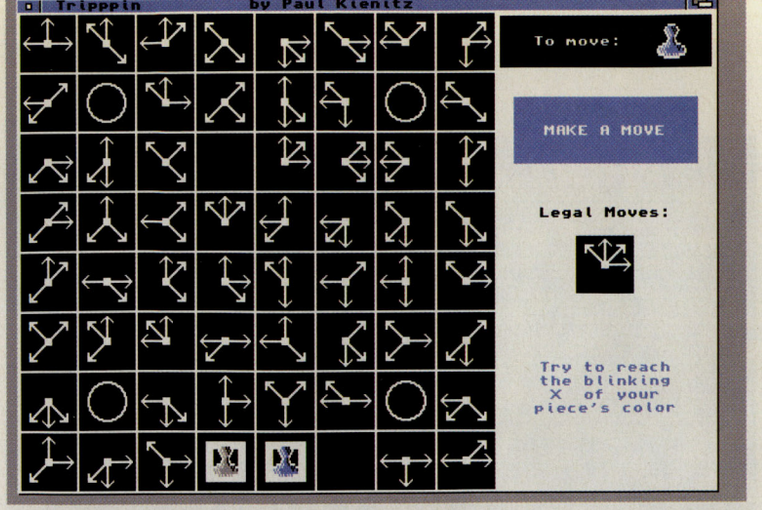
SystemPrefs

SystemPrefs allows you to change chip settings such as caches on and off. This is a better solution than Imdad Shah's usual method... The Amiga would be opened, a hammer then would be used to 'adjust' the caches by means of a clouting the CPU about its being. This had an unfortunate side effect in that everything else was switched off as well. Carrie Eyles would then come along and swap chips... for those bought in the fish and chip shop. After this operation, power was applied and an electrifying experience occurred that was so shocking that people in the Cole Valley area had a blackout. The moral of this long story is: just use SystemPrefs so we can all go home very early.

The Great *AUI* Games Disk No.1
AUIMay97a

Sproing

You are the character on a spring (Zebedee perhaps?) who must try to get from the bottom of the screen to the top without getting injured. The way you make your way from the bottom is by jumping through the gaps in the floor, or ceiling, depending on how you view it. As you jump, mind you don't bang your head on the next floor as it gives you a bit of a headache. Understatement there. Aspirin anyone?



Friends

So you think that your friends are really your friends. Think again, because deep down they are gangsters and would do anything to get the better of you. As they say, never judge a book by its cover.

The aim of the game is to blow away your opponent (which will be your best friend) without blowing yourself up. Logical, isn't it? Hey, we are getting good at this stuff.

CrazyChallenge

The name just gives it away unless you are thinking of something else. You either have to be pretty crazy or have excellent wrist action to play this game. It is very demanding and requires great stamina as it takes you through different events such as the 100m dash, the long jump, the half kilometre run, and many other events which involve your joystick (BEWARE! Smoking of joysticks). At the end of each event you will be fairly exhausted unless you are used to this kind of thing. By the end of the game, if you get that far because we didn't, we can bet our cotton socks that your arm will be tired.

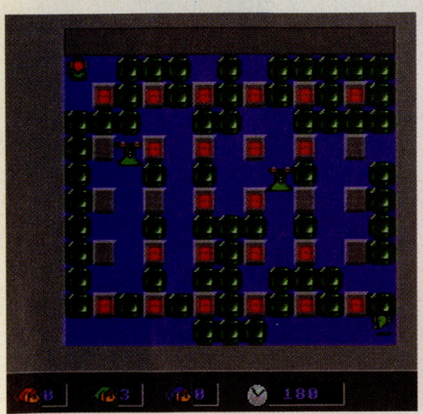
The Great *AUI* Games Disk No.2
AUIMay97b

Trippin

Put on your thinking boots or your in-line skates like Shreen would (but don't trip over once you are wearing them) and load up Trippin. This is a very good puzzle game, the aim is to reach your position which is marked by an X (when does X ever not mark the spot?). However, it is not as easy as it seems because you can only move in directions dictated by the computer. So make sure you make the right move and don't trip up.

MachoKillers

An 'Operation Wolf' style game without the scrolling, but the aim of the game is the same... to shoot the enemy! Just wait until a baddie shows up on the screen, aim at them, and pull the trigger on your double-barrel laser shotgun.



Friends.



Crazy Challenge.



Macho Killers.

WAIT

DON'T SELL YOUR AMIGA YET!
WE WILL UPGRADE YOUR A1200/A4000 TO A POWER AMIGA WHATEVER THE SPEC.
CALL TO SEE HOW MUCH YOU CAN SAVE..

POWER AMIGA

FOR ONLY

£1,499

POWER
CD ROM

POWER
1 GIG HD

POWER
22 MEG

POWER
MONITOR



POWER
ZORRO SLOTS

POWER
3D CHIP

POWER
64 BIT

POWER
060

The new Power Amiga is here at last. Supplied ready to use with CDROM, 3D chips, monitor, and plenty of RAM. Finally, an Amiga that comes with everything you need to create stunning work whatever field you choose - Graphics, Editing, Music, etc...
Fully compatible with existing Amiga software. And of course, a whole wealth of software made especially for Power Amigas including Direct Software's own "Haunted" along with the full backing and support from the makers of Valhalla - Vulcan.
Utilise the incredible enhanced graphics options on your existing software.
The difference you'll see when taking the step upto 1280 x 1024 in true 24 bit will blow your mind!
Just think, with the power of the 060, you can process images in real time - with no delay!
Emulate the most powerful PC's and Mac's with ease.
The Power Amiga will be unveiled to the public at the 1997 World of Amiga Show.

95 MARLBOROUGH ROAD
KIRKBY IN ASHFIELD
NOTTS NG17 7HR

FAX:01604 722498

DIRECT SOFTWARE

CALL NOW TO RESERVE YOUR POWER AMIGA

TEL:01623 455398

DISK INFORMATION

Additional Information

Floppy Users

You can install to any disk except this month's SuperDisk. When asked whether you want to install to floppy or hard drive, select 'f'. When prompted, insert your destination disk into df0: - the internal drive. This disk will then be formatted.

Installation time varies according to the amount of information we have compressed onto the SuperDisk for you. Some installations may require some disk swapping.

Hard Drive Users

You can install directly to hard drive. Boot the odd-numbered SuperDisk as you would for a floppy installation, and select the disk you wish to install. When asked whether you want to install to floppy or hard drive, select 'h'.
You will then be presented with a list of devices to which you can install, and the amount of space available on them. bear in mind that to install the whole set of disks will require somewhere between 2 and 3 Mb.

The installer will create a drawer with an exact copy of the floppy version of the SuperDisk in it. This includes startup-sequences, fonts, libs, and so on. Delete those that are unnecessary, and move any files in the libs, fonts, devs, etc., to their appropriate places.

Please note that the default tool for any text or document files will need changing from 'least' to your favourite, or just place a copy of least in your C directory.

You cannot install to any path that contains the following letter sequence: 'df', 'pc', 'ds', 'ram', or 'cd'. This is to save confusion with existing Amiga devices.

Expert Users

Installation directly to hard drive is so easy that we recommend you take advantage of our installer. However, if you want to do things the hard way, please remember that the even-numbered SuperDisk is in the Diskspare format and requires you to have diskspare.device installed in your devs/DOSdrivers drawer.

All the necessary files - diskspare and UnLzx - can be found on the odd-numbered SuperDisk and, as an expert user, you don't need us to tell you how to find and use them.

Viruses

During compilation we constantly check the SuperDisks with the latest versions of the best anti-virus software we can find. Although, to be on the safe side, we suggest you do the same prior to installation.

Shutters

Before installing the SuperDisks we recommend that you check the metal shutters on the disks for damage. This is best done by gently sliding the cover back and then letting it spring back under its own power. If it sticks, or if it appears to be coming away from the plastic casing, then DO NOT INSERT IT into your drive. You may not be able to retrieve it.

Damaged disks should be returned, see below. Neither ***AUI,*** the Publisher, or the disk duplicators, are liable for any damage caused to your machine by failure to following these simple guidelines.

Returning your SuperDisk

In the unlikely event that your SuperDisk is damaged or simply does not run then please return it to: TIB PLC, TIB House, 11 Edward Street, Bradford, BD4 7BH enclosing a stamped, self-addressed, envelope. A new SuperDisk will be returned together with the postage costs you incurred.

Technical Support

TIB operate a technical support line if you need advice. They can be reached weekdays between 10am and 12:30pm, or between 1:30pm and 4:40pm, on 0891 715929

This is a premium rate line, and calls are charged at 49p per minute. Please do ask for permission of the phone owner before making the call.

Important Information

All the software included on the SuperDisks is thoroughly checked on several machines before we even consider using it. After compilation the SuperDisks are installed to floppy and hard drive several times prior to duplication. And after duplication examples are selected at random for further testing.

While we cannot exclude the possibility of an error on our part, the most likely cause for a SuperDisk malfunction is YOU! Read the documents that came with the software you are trying to use. If there are libraries that need to be moved, or programs that need to be assigned, then refer to your Amiga's manual.

If you really get stuck then write in to Amiga Answers, enclosing a stamped, self-addressed, envelope for a quick reply. otherwise you could wait up to three months for the answer to appear in an issue of the magazine.

We regret that we CANNOT TAKE ANY TELEPHONE CALLS regarding the SuperDisks. They are too time consuming to answer and we are often busy getting the next issue of ***AUI*** together for you.

Reader's Contributions

Our SuperDisks are crammed full with the cream of the Amiga crop. Many of the programs are created especially for us and released into the Amiga community through ***AUI.*** You can make it possible for ***AUI*** to share this top quality software with tens of thousands of other Amiga users.

If you have a masterpiece that you think can cut it with the best, then please send it in to us for evaluation. You never know, you might end up famous. The address is: Reader's Contribution, Amiga User International Magazine, Unit 2, Utopia Village, Chalcot Road, London. NW1 8LX

Alternatively you could send us a UU-encoded file via e-mail to:

amigauser@cix.compulink.co.uk

Please remember we prefer stand-alone compiled programs, and don't forget to include any libraries or fonts that it might need - providing they are distributable. We don't want you to get done for piracy!

Shareware

Many of the programs on our SuperDisk are Shareware. This means that you can try them out, but if you use them regularly you should send the author the requested registration fee. This not only encourages the author to produce more work, they feel wanted, but you will often receive the latest version of the software.

Registration fees can be up to £20, but most hover around the £5 mark. You can send cheques to UK addresses, but those abroad often prefer US dollars. These can be sent by registered post, but sending cash is always a risk and it's your money.

Some authors may only want a postcard to see how far their program has got. Do make their day. after all, they made yours.

Compatibility

All the software on the SuperDisks runs on a basic A1200, most will work on a 2Mb equipped A500+. We deem this to be the minimum specification of Amiga nowadays and, as the A1200 is now the entry level machine, many programmers are only developing for this platform.

If you are still using Kickstart 1.3 then we are sorry we cannot accommodate you. To get the best out of your Amiga you must have a decent amount of memory - a minimum of 2Mb - and Kickstart 2.04/Workbench 2.0 or better.

Documentation

All the documents that accompany the programs on these SuperDisks can be read by simply double-clicking on their respective icons. The text will scroll under mouse control, and to exit just press the [Esc] key - top left on your keyboard.

Some files are in AmigaGuide format. They are recognisable by the node information within the text. To take advantage of these 'hyper' documents, you need to have either AmigaGuide or Multiview installed on your system, and to change the default reader tool from 'least' to the appropriate tools you usually use.

Any word processor should be able to load the document files as they are in an ASCII format. ***AUI*** *Enjoy!*

Tower Kits

Big Box Towers



Our range of *Amiga Tower Kits* will enhance the specification of your Amiga. They benefit from quality construction and have dimensions of 640mm x190mm x410 mm approx.

There is room for 6 x 5.25" devices, two 3.5" devices and two 3.5" hard drives(hidden). Kit includes mounting chassis for internal floppy drive and all parts to mount the Amiga. There is room for an additional fan and also included is a 230W temperature controlled PSU.

The A1200 version includes an Amiga/PC autosensing keyboard adaptor and allows use of the PCMCIA.

Tower for A4000 (Tower and PSU)	£249.95
Tower for A1200 (Tower, PSU, Keyboard adaptor)	£199.95

CD-ROM, RAM, Keyboards

8 Mb SIMMs	£ 34.95
16Mb SIMMs	£ 69.95
32Mb SIMMs	£134.95
8 X CD ROM drive (Internal SCSI)	£139.95
Windows 95 Keyboard	£ 19.95

Tower 4000PCI Kit

Our *Tower 4000 PCI Kit* expands the desktop A4000 with further Zorro III, Video, PCI and ISA slots. The PCI slots allow the use of our *Pentium* processor boards to take advantage of multiple computer platforms in one Tower.

- BigBox Tower (6 x 5.25" Bays, 5 x 3.5" Bays)
- 230W temperature controlled PSU
- 7 x Zorro III Slots (5 DMA Buster)
- 3 x PC PCI Slots
- 1 x Slot for Pentium Board
- 3 x PC ISA Slots
- 2 x Video Slots

Tower 4000 PCI Kit £379.95

Tower 4000 Kit

Our *Tower 4000 Kit* expands the desktop A4000 with further Zorro III, Video and ISA slots. The ISA slots allow the use of our *486* processor board to take advantage of multiple computer platforms in one Tower.

- BigBox Tower (6 x 5.25" Bays, 5 x 3.5" Bays)
- 230W temperature controlled PSU
- 7 x Zorro III Slots
- 5 x PC ISA Slots
- 2 x Video Slots

Tower 4000 Kit £299.95

Tower 1200PCI Kit

Our *Tower 1200 PCI Kit* expands the A1200 with Zorro II, Video, PCI and ISA slots. The PCI slots allow the use of our *Pentium* processor boards to take advantage of multiple computer platforms in one Tower.

- BigBox Tower (6 x 5.25" Bays, 5 x 3.5" Bays)
- 230W temperature controlled PSU
- 7 x Zorro II Slots
- 3 x PC PCI Slots
- 1 x Slot for Pentium Board
- 3 x PC ISA Slots
- 2 x Video Slots

Tower 1200 PCI Kit £429.95

Tower 1200 Kit

Our *Tower 1200 Kit* expands the A1200 with Zorro II, Video and ISA slots. The ISA slots allow the use of our *486* processor board to take advantage of multiple computer platforms in one Tower.

- BigBox Tower (6 x 5.25" Bays, 5 x 3.5" Bays)
- 230W temperature controlled PSU
- 7 x Zorro II Slots (Non DMA)
- 5 x PC ISA Slots
- 2 x Video Slots
- Built in Keyboard adaptor (Amiga or PC)

Tower 1200 Kit £339.95

Blittersoft



PC 486 and Pentium Boards

Our *PC 486 and Pentium Boards* can be used in conjunction with our ISA (486) or PCI (Pentium) slots. This means that our Towers can offer a complete multi-platform solution (Amiga, PC and Mac) via these boards and *Fusion*. Integration can be further enhanced by using the *Siamese system (or Siamese-Mac system)*.

- 128Kb (486) and 256Kb (Pentium) Cache (Expandable to 1Mb)
- Floppy and HDD Controller, Keyboard socket
- PC104 Expansion Port
- 486 Board accepts Processor at DX2/DX4 up to 100MHz
- Pentium boards accept processors at P75, 100, 120, 133 and 150MHz. (Standard) and P166 or P200 for high end models.
- 2 x Serial Ports, 1 x Parallel Port
- External Power Connector
- 128Mb RAM capability.

486/Pentium Board CPU Prices

486DX4 Board	£299.95				
Pentium PCI Board (Standard)	£349.95	**486DX4/100**	£ 34.95	**Pentium P120**	£ 99.95
Pentium PCI Board - On board VGA and up to P166	£449.95	**Pentium P133**	£169.95	**Pentium P150**	£189.95
Pentium PCI Board up to P200	£399.95	**Pentium P166**	£299.95	**Pentium P200**	£379.95

Village Tronic

***Picasso IV* is a brand new Graphics board for any Zorro II or III Amiga. Feature Include:**

64-bit Cirrus CLGD 5446 Chip
4Mb Fast EDO RAM
On-board Flicker Fixer
Genlock compatible
"Video -on-Workbench" Mode
Ports for additional MPEG, TV-Tuner and 3D Chip



VILLAGE TRONIC

Picasso IV 4Mb £299.95

Picasso II+	£199.95	**Pablo Video Encoder**	£ 79.95
Ariadne	£149.95	**Liana 1.6m cable**	£ 59.95
Liana 5.0m cable	£ 69.95	**AmiTCP**	£ 69.95
OS3.1 A500/600/1500/2000 (ROMs Disks, Manuals)	£ 74.95	**OS3.1 A1200/3000/4000 (ROMs, Disks, Manuals)**	£ 89.95
OS3.1 A500/600/1500/2000 (ROM only)	£ 44.95	**OS3.1 A1200/3000/4000 (ROMs only)**	£ 59.95
MainActor Pro	£ 59.95	**MainActor Broadcast**	£149.95
MainActor Broadcast (Upgrade from Pro)	£119.95	**RapidFire SCSI-II + 8Mb RAM capacity**	£129.95
SpitFire SCSI-II	£109.95		

Developed by HiQ Ltd Siamese System

The Siamese System is the means to allow the Amiga and PC to integrate neatly.

- Single Monitor automatically switches between PC and Amiga Screen.
- Single Keyboard and Mouse operation across both platforms.
- Built in Serial networking with all Amiga mounted PC drives.
- High speed SCSI network with suitable SCSI interfaces.
- Read and Write on any PC Drive at high speed, including Networked Drives.
- Text Clipboard, Cut and Paste between Amiga and PC.
- Full Arexx support built in.
- Share Printer, all Amiga output sent to PC printer.
- Access to low cost PC products e.g.. 16 bit Sound Cards.
- Amiga MCI controller from AmigaDos or Arexx, (Media Control Interface).

Siamese System £149.95
Siamese-Mac Pack £179.95
This pack offers the full Siamese features above, but also includes a full Macintosh emulation module.

RTG - Siamese Pack
New software pack that offers retargeting of many Amiga screens to the video board within your PC! £ 69.95

Graffiti and Cat Weasel

Graffiti - Fast Chunky adaptor!

The Graffiti adaptor plugs into the standard video connector and offers fast 256 colour chunky pixel screens on any Amiga. It is a great way to speed up the Mac and PC emulation, and is gathering software support in the public domain.

Graffiti Graphics Adaptor £ 59.95

CatWeasel - Floppy Controller for A1200

The Cat Weasel controller will open up a whole range of Disk Formats using cheap PC High Density Drives :
Amiga (HD,DD), PC (HD, DD), MAC (HD)

Cat Weasel (1200) £ 59.95

Fusion

***Fusion* is a software only Mac emulation for ANY Amiga with 68020 or better CPU. It represents the most advanced Mac emulation available for the Amiga.**

- Works on all Amiga's with 68020 processor or better
- Supports all modern Macintosh operating systems (7.1.0 through 7.5.3)
- Virtual Memory Support (System 7.5.0 or later + MMU
- 68060 compatible
- Support for all usable video boards and Graffiti box
- Use of 256K, 512K and 1Mb MAC ROMs
- Supports 2, 4, 16, 256, thousands and millions colour modes
- Stereo Audio
- Multiple video display support (up to 6 screens at a time)
- Workbench Video driver, up to 256 colours in a window!
- On the fly resolution switching (System 7.5.0 or later)
- Ethertalk (requires Amiga Ethernet board)
- Appletalk with Emplant hardware
- Supports up to 14 AmigaDOS devices
- Supports CD-ROM drives, hard drive partitions, hard files and ram disks
- Supports serial and parallel using any Amiga or compatible port
- Clipboard sharing (text) and built in file transfer/translation
- Custom FPU routines for high performance floating point operations
- Custom chunky to planar conversion for fastest possible graphics
- Supports AMAX, EMPLANT, MAC high density, PC 720K and PC high density disks.
- Direct SCSI and Serial access through Emplant hardware.
- Supports Akiko when used with CD-32 with SX-1/SX-32
- Supports 020 through 060 processors and 68881/2.
- OS2.x style guide compliant interface on public screen.

Owners of Emplant 1200 or Mac Lite can upgrade for halft he usual price by sending in their original disk.

Fusion £ 49.95
Fusion Upgrade (from Emplant 1200 or Mac Lite) £ 25.00

AWeb

AWeb-II is the most advanced Web Browser available for the Amiga. The HTML-2 standard is fully supported, including forms. Many HTML-3.2 features are also supported, like backgrounds and centreing. AWeb supports the use of proxies for HTTP, FTP, Gopher and Telnet. By using external programs, FTP, Mailto, Telnet and News can also be used. AWeb lets you load all images, delay all image loading, or load only clickable maps and delay other images. The 24-bit picture datatype (picturedtV43) is supported.
AWeb-II requires : Workbench / Kickstart 3.0+, Approx.3 MB of hard disk space for software. 510 MB of free space for disk caching. 2 Mb RAM, 1 Mb chip RAM. A working TCP/IP stack (AmiTCP), appropriate GIF, JPEG, IFIF, 24bit datatypes.

AWeb-II £ 39.95

Get it Now!

eagle 1200 TE

All our new Amiga's are built exclusively under full Amiga Technologies OEM license under the "Amiga-Based" Trademark.

Eagle 1200TE £ 549.95
- High quality Tower
- Original Amiga Technologies Motherboard
- IDE Bus, OS3.1,
- 2Mb Chip RAM
- 230W PSU, PC Keyboard and System disks

Eagle 1200TE-40/40 £ 749.95
As Eagle 1200TE but with :
- 68040 40MHz Blizzard Processor

Eagle 1200TE-60/50 £ 899.95
As Eagle 1200TE but with :
- 68060 50MHz Blizzard Processor

eagle 4000 TE

All our new Amiga's are built exclusively under a full Amiga Technologies OEM license under the "Amiga-Based" Trademark.

Eagle 4000TE £1199.95
- High quality Tower
- Original Amiga Technologies Motherboard
- SCSI-2 and IDE Bus, OS3.1
- 2Mb Chip RAM, 4Mb Fast RAM
- 230W PSU, PC Keyboard and System disks

Eagle 4000TE-40/40 £1629.95
As Eagle 4000TE but with :
- 68040 40MHz CyberStorm Processor
- 1Gb Hard drive

Eagle 4000TE-60/50 £1799.95
As Eagle 4000TE but with :
- 68060 50MHz Cyberstorm Processor
- 1Gb Hard drive

Best Prices Guaranteed! Phase 5

We are an Approved Phase 5 Dealer

***Phase 5* accelerators offer unrivalled performance and price. There are various models to suit most Amiga's.**



CyberStorm MKII 060 (50MHz) for A4000(T) or A3000(T)	£479.95
CyberStorm MKII 040EC (40MHz) for A4000(T) or A3000(T)	£319.95
Blizzard 1260 (50MHz) for A1200	£399.95
Blizzard 1240ECT (40MHz) for A1200 Tower	£249.95
SCSI-II Fast for all CyberStorm versions	£ 89.95
SCSI-II Fast for Blizzard 1260 and 1240	£ 89.95

PCx

***PCx* is an all new (Software only)80x86 emulation for any 68020+ Amiga!**

- Intel Pentium Processor(tm) (FPU supported if Amiga has FPU)
- PS/2 keyboard & mouse Bus mouse emulation
- Dual 8273 DMA controllers
- Dual 8259 interrupt controllers
- 8254 timer and 8272 disk controller
- 82C55 parallel interface
- 16C550 serial interface
- Cirrus 5428 chipset (VGA/SVGA graphics)
- SoundBlaster(tm) compatible DAC
- Standard PC speaker sound
- IDE controller (supports two virtual IDE devices)
- Supports up to 16 Mb of memory (with 1:1 memory mapping)
- Support for all usable video cards
- Native ANSI driver for fast TEXT modes
- Native CD-ROM driver
- Native ASPI driver for direct SCSI access
- Native network driver for accessing AmigaDOS devices
- 100% hand optimised68K assembly language for best possible performance
- OS2.x+ compliant user interface
- CPU Transcription converts 80x86 code to native code 68K code

PCx £ 49.95

ACE and Apple II

ACE is an Atari emulator for the Amiga. The Atari computer was created by the same man who created the Amiga, Jay Miner. Many programs developed for the Atari were gold medal winners in their categories.

APPLE II puts into your hands the ability to use many of the museum-quality applications written for the Apple II's. It offers you several models of emulation Apple II/II+, IIe, IIc, and IIgs. Many have cited the Apple II as one the first computers for personal use. It has been embraced by educators and admired by historians.

Requirements : Amiga 2.04 OS (V-37) or newer, 1Mb RAM, 68020 or better CPU and appropriate System ROMs
There are literally hundreds of games and utilities freely available on the internet/WWW for both emulations!

ACE and APPLE II £ 19.95

StormC/StormWizard

The Advanced C/C++ Development System for the AMIGA !

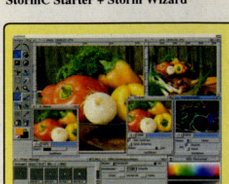
StormC is an integrated development system which contains all development tools imperative for efficient engineering: editor, compiler, linker, debugger and RunShell with many outstanding features. The heart of StormC is its visual project manager which manages every part of the project, e.g. sources, headers, libraries, documents, binaries. The very fast editor displays colour coded key-words to get a better readability and a syntax check.
The StormC compiler handles ANSI C and C++ sources and generates optimised code for the whole Motorola 68xxx family (including 68060 and 68881/882).
The RunShell is a powerful run-time system that monitors the running application and prevents it from crashing the system. It also offers resource tracking and it can start the source-level debugger *during* run-time of the program.

StormC £229.95
StormC - Upgrade option £149.95
Just send in your original disks from ANY programming language!
StormC Starter £ 99.95
Reduced features, fantastic introductory version.

StormWIZARD - New GUI editor

StormWIZARD is a tool to make designing of GUIs simple. You will get an AmigaOS compliant UI very quickly without programming one line of code!

StormWizard £ 49.95
StormC Starter + Storm Wizard £124.95



ArtEffect unites painting and image processing with a particularly productive user interface. ArtEffect is not "just another" graphics program for the Amiga. It is not oriented towards the current "standard" programs on the Amiga, but rather to the classic programs for professional image processing such as Photoshop (TM) and for creative painting like Fractal Painter (TM). These pictures show ArtEffect in action.

Creative. Intuitive. New.
ArtEffect
The Ultimate Graphics Program.



ArtEffect £ 69.95

Software

AsimCDFS 3.5	*Total CD-ROM package*	£ 49.95
MasterISO	*Amiga CD-Writing software*	£129.95
MasterISO + AsimCDFS		£149.95
ImageVision	*Multimedia authoring system + CD*	£ 49.95
World Construction Set	*(Scenery Generator)*	£119.95
World Construction Set 2	*(Advanced version)*	£249.95

Tel : 01908 261466 Fax : 01908 261488
Tech : 01908 261477
Blittersoft
6 Drakes Mews, Crownhill Industry,
Milton Keynes. MK8 0ER. UK.

Order by Access/Visa/Delta/Switch or Postal Order/Cheque. No added surcharges. All prices fully inclusive of VAT. Postage and Packing £8.00 (24 Hour) and £20.00 (Saturday). Prices and specifications may change without notice. Please telephone to confirm pricing/specification/ availability before ordering. E&OE. All trademarks acknowledged. All orders subject to our terms and conditions of trading, available on request. Trade enquiries welcome.

e-mail : bsoft@wildnet.co.uk Web Site : http://.blittersoft.wildnet.co.uk

Page 14

The Last Picture Show
Another New Amiga?
The Small Minded World of Amiga

Page 15

Powered Up and Ready To Go
ACE comes up trumps
ACES' Service

Page 16

Heavy Memory
All-In-One
Go ahead, make my day.
Gated

Page 18

Jobs for The Boy
An Amigan Hero?

Page 20

Amiga in Education
Virtually the End?
Super TFT
Quaking in Our Boots
GVP Rescue

Page 22

I shall say zis only once
Half-way in between
Sun Rescues Pre-Pentiums
Epic Proportions
Cashing in Their Chips
PC beats TV

Page 24

MakeCD 2.1 out now
Wirenet's Web Space
Web Site For Voters
Terabyte Anyone?
Really Guilty?
DVD-RAM

Page 26

How many?
Sound Matters
Not Chickening Out
Chipping Away at The Good Life
Meter Modems Off

Compiled and edited
by Anthony Mael and Martin Witton
with help from David Ward

THE LAST PICTURE SHOW

Microvitec have told ***AUI*** that they are stopping production of their Amiga compatible monitors. ***AUI*** has also discovered that they are selling their existing stocks off at very low prices, so you should be able to pick up a multi-standard 14 or 17 inch monitor at discount computer stores for up 40% less than the usual advertised prices. For instance the Microvitec 1701, which has been advertised in ***AUI*** for about £530, was recently seen in a London store at £352, a saving of £178.

This sad news means that there is now no monitor on the market that will work with the TV scan rate Amiga screen modes, those often used by system alerts and games. PC compatible monitors do not sync down to these speeds and so cannot be used unless the Amiga is fitted with a hardware flicker-fixer or scan-doubler - a device that was built-in to the A3000, but was a third-party optional extra for all the other Amiga models - or a 24-bit graphics card. The latter only being a reality if you have a "big-box" Amiga.

Microvitec explained that they could immediately restart the manufacture of Amiga compatible monitors should they receive an order large enough for the production run to become economic.

Their big break was when Amiga Technologies commissioned them to produce monitors that AT intended to badge as "Amiga". As someone said recently "Amiga Technologies? Whatever happened to them?"

Now the monitors they wanted to market have gone the same way as the Amiga. Sad days, indeed, for Amiga users.

Another New Amiga?

For a computer that only exists for many in a sort of limbo, it amazes us that there are still new machines claimed as being produced. ***AUI*** reported in this NewsFile in the February 1997 issue about QuikPak's A4040, A4060, and A5050T models. Now news reaches us of yet another company claiming to enter the high-performance Amiga market. Direct Software, better known for their Amiga software shop in the Midlands, has told ***AUI*** that they are going to produce the "Power Amiga".

This exciting sounding, tower-based machine is, say Direct, to be equipped with a 68060 chip, a 64-bit 3D graphics board offering 24-bit 'true colour' and video in a Workbench window, eight speed CD-ROM drive, a one gigabyte hard drive, seven Zorro slots, five PC ISA slots, two video slots, and 22Mb of RAM. Yes, that's all. A mere 22Mb of RAM. How did we ever manage with just 1 megabyte? And, continue Direct Software, this wonder machine is to be sold at the interesting price of £1,499.

The machine is claimed to be going to have its first outing at the forthcoming World of Amiga Show (May 17th.-18th.) at London's Hammersmith Novotel. Direct Software say they will be taking advance orders from the public for their new machine as well as demonstrating "its PC beating capabilities".

Direct claim too that "Many companies have been impressed with the Power Amiga and some have already taken delivery so that they can begin software development for it."

Interesting, isn't it? That so many companies say they would like to step into a market that everyone outside the Amiga field says is dead?

Whether Direct will be able to manufacture and sell their "Power Amiga" in sufficient quantities to make it a viable product - or whether any other company who wants to get into the Amiga market can either - remains to be seen and better still used.

The Small Minded World of Amiga

We are happy to keep plugging the forthcoming World of Amiga Show for the organisers. Doubtless everyone in the depressed state of the Amiga world will want to know any sign of life in the machine and get together with others who also need a tonic - and possibly a vodka to go with it. However, we don't need silly, nationalistic attempts by anyone to get publicity. We refer to a press release put out by the organisers headed "THE YANKS ARE COMING!"

We thought that in this country, as elsewhere, we had reached a stage of rather more maturity than to call "foreigners" by silly names. Americans - or citizens of the USA, to give them their correct title for "America" is larger than just the USA - will tell you that many of those citizens would deny they are "Yanks" or Yankees who would come only from a relatively small part of the USA.

It's like calling Japanese "Japs" or French "Frogs", Germans "Krauts", Italians "Wops" or "Eyties" and Spaniards "Dagos". All names which contain an element of childish, jingoistic contempt or derision.

That's no way to create a world in which we collaborate not fight. And that's as true of the world of Amiga as any other. Anyway the, we hope not small-minded or childish but usefully co-operative, World of Amiga will be at the Novotel in London 17th/18th May.

And the Americans - not Yanks - to whom the Show's overexcited organisers were referring are Nova Design who are said to be bringing the latest version of their special effects package ImageFX.

Powered Up and Ready To Go

phase5 has told ***AUI*** of two forthcoming accelerator boards for Amiga computers. The Blizzard 603e Power Board is a PowerPC-based accelerator for Amiga A1200 and A1200-based Tower Systems. Fitted with a Motorola 603e RISC chip the new accelerator, claim phase 5, offers "a magnitude of performance unheard of at a sensationally low price that is perfectly targeted at the A1200 upgrade market".

The Blizzard 603e Power Board incorporates phase5's dual-processor technology where a fast PowerPC RISC processor is combined with a 68030 CISC processor to maintain compatibility. Both CPUs share the memory and system buses "in order to achieve true multiprocessor behaviour". While the original AmigaOS 3.x continues to run on the 68030 CPU along with all other existing applications "the PPC Library developed by phase5 gives software developers the opportunity to optimize their programs step by step by porting single tasks to PowerPC code which then can run parallel with 68k tasks. Many important Amiga software vendors are preparing special versions of their software packages, and phase5 expect a large number of commercial programs will be supporting the PowerPC soon."

The Blizzard 603e Power Board will be equipped with a fast 120MHz PowerPC 603e and a PGA (Pin Grid Array) socket is provided for the 68030 companion processor which you have to provide yourself. The board provides a fast memory expansion option by using standard PS/2 type SIMMs, and the memory is shared by the two CPUs. An optional Fast SCSI-II controller will be available, say phase5, for the Blizzard 603e Power Board in due course.

phase5 DIGITAL PRODUCTS

WHERE DO YOU WANT TO BE TOMORROW?™

phase5 claims it will supply a comprehensive software package to support the board which includes many tools for creative users. These include, say phase5, a PD GNU C compiler for PowerPC (including source code), plus demo programs and utilities with source code. In addition to this free software developer support is to be available via the phase5 FTP site.

phase5 are also releasing a PowerPC optimized version of CyberGraphX v3 with RISC optimized CyberGL/3D. MPEG functions and libraries are included along with a special GGX driver to support the AGA chipset.

With its 120MHz 603e processor the Blizzard 603e Power Board provides, claim phase5, - only on the PPC side - a raw performance of approximately 170MIPS or approximately 3.5 SPECint95* and 2.8 SPECfp95*.

The 200MHz 604e processor version of the Cyberstorm PPC provides - only on the PPC side - a raw performance of more than 350MIPS or approximately 8.1 SPECint95* and 7.1 SPECfp95*.

Both cards therefore, say phase5 proudly, offer "a blistering performance that goes far beyond most PC systems available today."

**** These estimates have been based on Motorola/IBM manufacturer specifications by phase5.***

The company told ***AUI*** that the Blizzard 603e Power Board will have "an amazing recommended retail price of £279 when it hits the streets in June." We hope that the pavement is well-padded before that event takes place.

Registered owners of a Blizzard 68030 board will, say phase5, receive a special upgrade offer via mail shortly.

The other board, phase5 told ***AUI*** about, was the Cyberstorm PPC, a PowerPC-based accelerator card for Amiga A3000s and A4000s as well as systems with a compatible CPU-slot. Like the Blizzard card above, the Cyberstorm uses many of the same features, such as the dual processor, but this time it is a 68060 or 68040 which handles native Amiga code.

The Cyberstorm PPC, say phase5, will initially be available with the PowerPC 604e processor in clock speeds of 150, 180, and 200 MHz. A DMA-driven Wide ULTRA SCSI controller is fitted which allows transfer rates of up to40Mb/s, "ideal for the most demanding and professional applications. A 32-bit high-speed expansion connector with DMA access to the main memory is also provided for later upgradability."

Prices, say phase5, are expected to be £529 for the 150MHz version, £649 for the 180MHz, and £769 for the top of the range 200MHz PPC board.

ACE comes up trumps

Adrian Emery of ACE Computers has told ***AUI*** about their forthcoming High Density floppy drives. Two models are said to be in production, an external unit and an internal unit ideal for big box Amigas. Prices are expected to start from around £45.

Contact: ACE Computers, 9 St. Nicholas Street, Bodmin, Cornwall BL31 1AA
Tel. 01208 79323

ACES' Service

An Amiga Coding Excellence Scheme (ACES) has just been launched with the sole aim, say its initiators, of providing quality Freeware to Amiga users with little effort on their part.

AUI has been informed that the Scheme operates on a few simple rules. First, the programs concerned must be Freeware and secondly, they must be of a high quality. Although this second point is a subjective issue, ACES works on the recommendations of actual users The organisers of ACES listed some of the features they feel make programs worth using and the more of these a program has, the more likely it is to be listed.

These are:

- Font sensitive GUI
- Keyboard shortcuts in windows
- Re-sizable windows

(if at all possible - good on big screen modes)

- ARexx port
- Amigaguide help (on-line is obviously better)
- An Installer script

(or a drag & drop type installation)

If you use a decent piece of Amiga Freeware, or you have written one, ACES ask that you submit it to them via email to aces@cyberservices.com.

The organisers of ACES told ***AUI*** that the Scheme is currently in a 'fledgling' state. They went on to say that "it could either work brilliantly, or fail miserably." Now that sounds fairly extreme, doesn't it? What makes the difference, they say, is user input. The organisers say ACES already has a growing library of submitted programs and is currently contacting the authors to liase with them.

Contact :Chris Jones, 7 The Heights, Brighton, East Sussex BN1 5JX
Tel. 01483 259393 x4163

HEAVY MEMORY

There was a time when a computer - an Amiga - would run on a half a megabyte of memory. These days we are familiar, as has been commented on in ***AUI***s NewsFile, that common or garden PCs - and when are they not common or garden? - are starting out with 32Mb. Yet it seems that it's not just computers that are getting heavier for memory.

Oki, who were one of the first companies to get colour printing for the Amiga - anyone remember the old OkiMate? - have told ***AUI*** that their award-winning OKIPAGE LED printer is to be upgraded. No, it's nothing of a high-tech nature. It's simply that they are adding 4Mb of memory to the existing 2Mb without any change in the price, which is, it's true, not a very cheap £925.

Nevertheless, it is really a sign of these extra powerful times when printers - not even computers - are starting out with 6Mb of memory.

Go ahead, make my day.

Intangible Assets Manufacturing (IAM) has told *AUI* that Enforcer v37 by Michael Sinz is now available. Enforcer is an advanced debugging tool for Amiga computer systems equipped with a 68020/68851, 68030, 68040, or 68060 CPUs. It uses the MMU to help detect stray pointers and access to invalid memory. The Enforcer archive for sale by IAM includes tools to help identify the exact location of bugs, including the line of source code in most C or Assembly code, as well as some other languages. It also includes a large on-line manual and some examples as to how errors can be caught.

The original Enforcer was written by Bryce Nesbitt, but was copyright Commodore-Amiga. It was instrumental in the development of AmigaOS 2.04 and to the improvement of the quality of software on the Amiga. Enforcer v37 is a completely new set of code designed to provide even more debugging capabilities across more hardware configurations and with more options. It now supports the 060 CPU, for instance.

The source code to all the Enforcer tools has always been available for use by Amiga developers for free, and the widespread use of Enforcer has been one of the reasons Amiga software is of such a high standard. However, with this release of Enforcer, only the author can make a special offer to people who wish to get the source code. This offer is detailed at http://www.iam.com/amiga/enforcer.html and in the Enforcer documentation.

Intangible Assets Manufacturing are suggesting that even if you don't need the source code to Enforcer, you should consider purchasing the source code to support the author and his continued work on Enforcer. Enforcer has been developed over many years, worked on by two of the most famous and capable of the former Commodore-Amiga Software Engineers. If you're an Amiga developer, Enforcer is, say IAM, "worth a lot to you and the quality of your software, so please support them."

More information about Enforcer, the downloadable Enforcer archive, and ordering information are all available through the Enforcer web page at http://www.iam.com/amiga/enforcer.html

Any questions about Enforcer should be directed to enforcer@iam.com

Contact: Michael Sinz, at Intangible Assets Manufacturing, 828 Ormond Avenue, Drexel Hill, PA 19026-2604 USA. Url. http://www.iam.com Eml. info@iam.com Tel. (orders only) +1 610 853 4406

All-In-One

Time was when to get a touch of colour printing with the Amiga you had to stand the nasty lines that the crude old Okimate printer insisted on making on the paper. Then you could, if you needed, go down to your local print shop and get a photo scanned in and given to you on a disk.

If you wanted a colour photocopy, you searched through the yellow pages for a local Xerox shop and were likely to be charged around £1.50 a copy. Were they the good old days - or are these the good old days now?

Prompting this thought is a new product from Hewlett Packard which just might be the next big thing for all of us. HP have brought out a colour printer-copier-scanner - "all-in-one". It is claimed to offer professional quality printing and scanning for a price not too far above the wallet-range of the home user and well within the budget of most small businesses.

For their new HP OfficeJet Pro 1150C they are asking a mere £699. And that includes VAT. For that price you get a monochrome printer running at 8 pages a minute (ppm), or 4ppm in colour. In copier mode the 1150C operates at 1ppm less. Scanning? It is claimed that 24-bit scanning is a breeze and they throw in Windows OCR software too.

For those who can come up with the cash, this little darling sounds just the kind of pressie we would like to give ourselves, don't you think?

Gated

He may be the world's top software person and have so much money he doesn't know what to do with it or how much it is - £10 billion or so is so difficult to count - but even that can't buy freedom from glitches. Bill Gates, Microsoft's ever richer boss, had a recent technological and personal embarrassment in his very own home town of Seattle. In front of an eminent 1500 person audience at the American Association for the Advancement of Science, he tried to demonstrate the joys of surfing the Internet by getting into his own mailbox. Alas for Bill the gremlins were about and the modem connection just collapsed after one minute and was apparently impossible to reconnect.

Going on to his next trick, he asked an assistant to demonstrate a new "seeing computer" which was supposed to be able to tell which part of its screen the operator was looking at by watching him with a mini-camera.

Not content with having embarrassed him once, the damned gremlins got him again. The computer refused to admit that the operator was looking anywhere but at the top of the screen.

The assistant got himself out of the jam, though, by quoting one of his boss's favourite lines, "It's not research unless there's a 90% chance of it not panning out."

Research? Is that what Microsoft called the first version of Windows '95 - and is that why the world is still waiting for Windows '97?

Amiga Mice

Replacement Mice £6.95
MegaMouse 400 .....£9.95
MegaMouse Plus (3 Button) £10.95
Optical Mouse £29.95
New Golden Image TrackBall.....£19.95
Pen Mouse .....£12.95 (ideal for CAD)



Ram Boards

RAM CARDS A1200

A1200 with clock and 4Mb £49.00
A1200 with clock and 8Mb £65.00
A1200 with clock, 8Mb & 33Mhz FPU ..£80.00

RAM CARDS A500/500+ & A600

A500 512K w/o clock £15.00
A500+ 1Mb w/o clock £20.00
A600 1Mb w/o clock £20.00
A600 1Mb with clock £30.00

Controllers

AlfaPower Hard Drive controller A500 ...£99
AT-Bus Hard Drive controller A2000 .....£69
Oktagon 2008 SCSI controller £99
Multiface III £79
PCMCIA Controller for CDRom for A1200 £69

Spider

NEW MULTI I/O CARD

FOR AMIGA 1500/2000/4000

Active 8 port high speed serial card. Multiboard Support 57600 Baud rate on all channels simultaneously. **£299**

New AlfaQuatro Buffered Interface

Specially made hardware and software. Allows 4 ATAPI devices, ie, 2 IDE hard disk & 2 IDE CD Rom to Amiga 4000 internal IDE controller, through Alfapower on Amiga 500/500+ and possibly Amiga 1200, comes with full IDE Fix software **£59**

Joysticks & Joypads

Amiga Joysticks **£9.95**
Amiga Joypads **£9.95**

Speakers

Multi Media Speakers
100 watt (pmpo) £30.00
Multi Media Speakers
240 watt (pmpo) £45.00
Multi Media Speakers
300 watt (pmpo)* £59.95
** 3D surround sound*

92% AUI



Winner of Gold Format Award in Amiga Format February 1997

Best pricing on CD ROM Drives & Hard Drives.

We can supply CD ROM solutions for ALL Amigas from A500 to A4000. We will match any genuine advertised price and also give free CD Cleaner on top where we have to price match any product.

All our External IDE CD ROM Drives have built in power supplies (they do not draw power from your Amiga)
Three different options to connect CD ROM drives to A600 or A1200

a) Use PCMCIA port for total external solution without opening up your Amiga. You can Hot plug this device without harming your Amiga.
b) Use Internal IDE port with AlfaDuo if you have 2.5" Hard Drive (will be with full IDEFIX software).
c) Use Internal IDE port with AlfaQuatro buffered interface if you have 3.5" Hard Drive (will be with full IDEFIX software).



All CD ROM drives have play CD facility. Audio connection at front as well as at the back. Metal casing.

	External A600/A1200	Internal A1500/A2000	External* A500/A500+	Internal A4000
Quad speed CD ROM for	£149.00	£119.00	£129.00	£109.00
Eight speed CD ROM for	£169.00	£139.00	£149.00	£129.00

*(for A500/A500+ Alfapower hard drive controller and Hard Drive is required). A1500/A2000 supplied with IDE controller & software. A4000 supplied with AlfaQuatro interface & Full IDE Fix software.

Floppy Drives



External Floppy Drive for all Amigas.....£39.95
Internal Floppy Drive A500/500+ £35.00
Internal Floppy Drive A600/1200+ ...£35.00
A-Grade Double Density box of 50 disks.....£13.00
including colourful labels

IDE Hard Drives

HARD DRIVES + AT-BUS CONTROLLER FOR AMIGA 500(+)/A1500/A2000/A3000/A4000

AT-Bus hard drive controller £69.00
Alfapower hard drive controller £99.00
Alfapower-640 640Mb hard drive £199.00
Alfapower-1.2G 1.2Gig hard drive £259.00
Other sizes please ring



IDE 2.5" Hard Drives

IDE 2.5" Hard drives come formatted and installed with Workbench. Cable, screws, software and instructions supplied. *(please ring for availability)*

60Mb	£59.00	250Mb	£99.00
80Mb	£69.00	340Mb	£109.00
★120Mb	£70.00★	420Mb	£119.00
170Mb	£79.00	540Mb	£129.00

IDE 3.5" Hard Drives

IDE 3.5" Hard drives come formatted and installed with Workbench. Cable, screws, software and instructions supplied. *(please ring for availability)*

640Mb	£99.00	1.7GIG	£179.00
720Mb	£110.00	2.1GIG	£219.00
840Mb	£125.00	2.5GIG	£239.00
1.0GIG	£159.00	3.2GIG	£Call
★1.2GIG	£165.00★	3.8GIG	£Call

Memory

4Mb Simms.....£20.00 16Mb Simms ...£60.00
8Mb Simms.....£30.00 32Mb Simms...£150.00

Scanners

800 dpi £79.00
800 dpi with full OCR (last few so hurry) ...£99.00
400dpi with Migraphs acclaimed Touch-Up, Merge-it and full OCR.....£119.00

Miscellaneous Products

44pin 3 connector cable £10.00
44pin 2 connector cable £5.00
40pin 3 connector cable 90cm £10.00
AlfaDuo 44pin to 40pin Interface & IDE cables...£20.00
AlfaQuatro 3x40pin buffered interface & IDE cables £39.95
DD floppy disks (50) *including multicoloured disk labels* £13.00
DD floppy disks (100) *including multicoloured disk labels* £25.00
3.5" Hard Drive Kit for A600/1200 *+ Install software* £15.00
Colourful Mouse Mat
Animal Jungle design and Dinosaur design ...£5.00
Optical Mouse Mat £5.00
2 in 1 Scanner/Mouse Pad *Can be used as a memo pad* £5.00
Contoured Wrist Pad.....£3.00
Plain Wristrest £2.00

CD Cleaners - 1/2 price

CD Rom Cleaner £3.00
Automatic CD Rom Cleaner *(battery powered)* ...£10.00
Laser Lens Cleaner £4.50

Accelerator Boards

1230 33Mhz + 4Mb £135.00
1230 33Mhz + 8Mb £145.00
1230 33Mhz + 16Mb.....£175.00
1230 50Mhz + 4Mb £179.00
1230 50Mhz + 8Mb £189.00
1230 50Mhz + 16Mb.....£219.00

All prices include VAT. Please add £3.50 P&P for items under £30.00, £5.00 for items over £30.00, £8.00 P&P for Scanners, Speakers & Hard Drives, £10.00 courier for next day. Tax Free Export Orders Welcome.

Golden Image accepts Access, Visa, Cheques & Postal Orders. E&OE. Prices subject to change without notice. Goods subject to availability. Specifications subject to change without notice.

GoldenImage (UK) Ltd

Unit 65, Hallmark Trading Estate, Fourth Way, Wembley, Middx HA9 0LB
Sales Hotline No: 0181 900 9291 Fax: 0181 900 9281
http://www.reserve.co.uk/gold Talking Pages: 0800 600900

Our standard terms and conditions apply – available on request. We do not supply on a trial basis.

VISA MasterCard SWITCH AMERICAN EXPRESS

Jobs for The Boy

The sad saga of Apple continues, oddly echoing that even sadder story of the Amiga. Those who have followed the fascinating items that have appeared in the NewsFile pages over recent months will have learned of the difficulties that have overtaken Apple. How they brought in Gil Amelio from NCR as their saviour and how more recently they have dumped Copland, their development of what was going to be the next operating system for the Mac. Instead they bought the NeXT development. That was the NeXT company created by Steve Jobs, the founder and erstwhile boss of Apple whose new operating system had captured Amelio's attention. Amelio even took in Steve Jobs with the NeXT company as a consultant to Apple and as someone to arouse the enthusiasm of all connected with the company.

Yet nothing is simple in this life. Confidence in Gil Amelio's ability to revive the failing - or should it be, falling? - Apple has been shaken by declining sales and heavy losses. Now insiders at Apple are saying that Amelio's influence is being undermined by Steve Jobs. It appears that Jobs, who was ousted from Apple in 1985, by the now long gone John Sculley whom he had himself brought in, has quickly built himself a power base by installing former colleagues at NeXT in senior posts. Also five senior executives, all appointed by Amelio, have departed in two weeks. Furthermore, Ellen Hancock, a close colleague of Amelio's who worked with him at NCR and came in to Apple in the key post of Executive VP in charge of technology, has been effectively demoted.

It looks, say Apple observers, that Steve Jobs, aided by the other founder of Apple, Steve Wozniak (who has also been brought in), is out to recover the power he once held. Whether even he can revive Apple though is doubted by the computer industry, who see the changes in Apple as too little and far too late.

Yet the one thing that Steve Jobs cannot be accused of is that he is in it for the money. Apart from whatever cash he salvaged from his shareholding in Apple, he went on to found Pixar, the animation company that created "Toy Story". When that company was floated on Wall Street, Jobs became a billionaire, but his shares are now worth even more because their value has leapt up as the distributors of "Toy Story", the Disney Corporation, have not only signed a contract with Pixar for its next - or should it be NeXT? - three films, which between them will cost some $200 million, but also have taken a substantial shareholding in Pixar too. Wall Streeters are saying that means that eventually Pixar might be taken over by Disney, not only to get them to make movies for them, but to stop anyone else getting Pixar either to produce its clever animations for them or even to stop this electronic graphics power house from being grabbed by some other competitor company.

Looks like even if Apple falls and rots, Steve Jobs won't be down to his last million for a while yet.

An Amigan Hero?

AUI has received interesting news of Carl Sassenrath, one of the real stars of the Amiga firmament and who made highly important contributions to areas of development as widely separate as Intuition and CDTV. He was, until not so long ago, one of the experienced Amiga experts recruited by VISCorp, but left and reported the failings of his erstwhile employers in some detail on the Internet.

It seems as a result of that message he received a large volume of e-mail, some of it asking him what he thought would be the future of the Amiga. This is his reply:

"Even as one of its designers, I cannot offer you a solid, positive answer. There are many paths from here. We are again back at the crossroads.

To me personally, I think the road must be a rebirth of those core concepts that made the Amiga what it was, and I encourage all of you to hold on, regardless of how desperate the situation may seem.

Please my friends, remain the rebels that you are. It is up to each of us to see to it that there always remains a choice, else I fear for our future, and the future of all personal computing.

A lot of people have asked what I will do next. In general, I can say that I am not pleased with the direction that personal computers have taken over the last decade. These systems are now a hundred times faster, with hundreds of times more memory. Yet are we better off? Are we more productive? Have they made life easier?

No, not in the least. In some areas they have made the situation worse...

This is not a hardware problem. The software is to blame. We have become enslaved by overly complex and twisted software. I'm talking here about systems like MS Windows, C++, TCP/IP, HTML, etc. They are all junk - the work of designers who don't really understand how our minds work or relate to our personal human condition.

Yes, complex things should still be possible. That is the kind of system I want to use, and that is what I am going to build next.

After creating the Amiga multitasking kernel, I didn't stop thinking about operating systems. I just figured that someone else was going to move us forward to the next best thing. It has not happened.

So now it has time to start afresh. However, this time I'm going to create for you and for me, not for some company whose CEO just wants to get rich. It will be wonderfully elegant, pure, efficient, and simple.

I have already begun. The system will be developed in two phases. The first is better means of expression, the second a better means of operation. If you want more information in the months ahead, link www.sassenrath.com into your Web browser site list and visit often.

So that is my journey, my future. I expect it to be a rough road at times, but this is the path I must take. It is my sincere hope that many of you Amigans will join me in the years ahead... with a system for the next century.

Stay in touch and all the best to you in the years ahead."

If there is a touch of Castro-in-the-Cuban-jungle or "It's better to die on your feet than live on your knees" rhetoric about the sound of the message, it does have the ring of true sincerity and it comes from someone who certainly knows what he is talking about when it comes to the Amiga.

Nevertheless, the idea of one man taking on the whole of the computing world and attempting to change it, though brave and even noble, is not likely to find many believers or followers in the field of high technology. They know that today's developments are carried not so much by individuals, but by huge battalions of very bright and well-disciplined teams.

Carl Sassenrath has earned the right to trust by Amiga users, but even we must also live in this less than sentimental real world. While Carl Sassenrath is not just a highly talented technologist but a very agreeable person, and anyone who has met him will concur, and while we would all love to see him take on the big battalions and succeed, the odds, sadly, must be against him and his path forward is likely to be over a very rough road indeed. Still, living up in the wilds of the USA there is a man, an Amigan, who has the real American spirit of "Can do!". And that should be a shining example to all of us.

MAGNUM

A1200 Expansion Cards

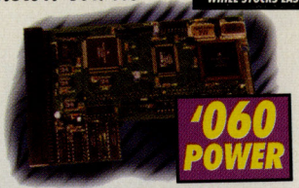
FREE OPUS 4.12 WORTH £50

FREE SOCCER MOUSE WORTH £19.99 WHILE STOCKS LAST



MAGNUM RAM8 CARD

SPEED INCREASE OF 2.3 TIMES - 2.88MIPS ♦ AVAILABLE WITH 0, 2, 4 OR 8MB OF 32-BIT RAM INSTALLED ♦ USES STANDARD 72-PIN SIMMS ♦ OPTIONAL PLCC TYPE FPU (FLOATING POINT UNIT) ♦ BATTERY BACKED CLOCK/CALENDER ♦ FINGER CUTOUT TO HELP INSTALLATION ♦ TRAPDOOR FITTING - DOESN'T VOID WARRANTY ♦ 0-4MB - PCMCIA COMPATIBLE (FOR USE WITH OVERDRIVE, SQUIRREL ETC.) ♦ ZERO WAITE STATE DESIGN.



MAGNUM 68030/68040 & 68060 CARDS

SPEED INCREASE OF UP TO 27 TIMES ♦ 68030/40 OR 60 PROCESSOR RUNNING AT 33/40 OR 50MHz (NEW PROCESSOR CHIP - NOT OVERCLOCKED) ♦ MMU IN ALL PROCESSORS ♦ '040 FITS STANDARD A1200 - NO PROBLEM & IS SUPPLIED WITH A HEATSINK & FAN ♦ UP TO 32MB OF RAM CAN BE ADDED ♦ KICKSTART REMAPPING ♦ OPTIONAL SCSI-II INTERFACE ♦ CAN ACCOMMODATE A 72-PIN INDUSTRY STANDARD SIMM ♦ 68040/60 HAVE BUILT-IN FPU, 68030 CARD HAS OPTIONAL PLCC/PGA TYPE FPU (FLOATING POINT UNIT) ♦ BATTERY BACKED CLOCK/CALENDER ♦ TRAPDOOR FITTING - DOESN'T VOID WARRANTY ♦ PCMCIA COMPATIBLE SO YOU CAN STILL USE PRODUCTS SUCH AS OVERDRIVE HD OR CD/ZAPPO CD-ROM OR SQUIRREL ♦ ZERO WAITE STATE DESIGN.

LOWEST EVER PRICES!

FREE UK DELIVERY

	0MB	4MB	8MB	16MB	32MB
RAM8	£39.99	£69.99	£89.99	N/A	N/A
RAM8 & 33MHz FPU	£59.99	£89.99	£109.99	N/A	N/A
68030/33MHz & FPU	£89.99	£119.99	£139.99	£179.99	£249.99
68030/40MHz	£109.99	£139.99	£159.99	£199.99	£269.99
68030/40MHz & FPU	£129.99	£159.99	£179.99	£219.99	£289.99
68030/50MHz	£129.99	£159.99	£179.99	£219.99	£289.99
68040/25MHz (inc. FPU)	£199.99	£229.99	£249.99	£289.99	£359.99
68040/40MHz (inc. FPU)	£269.99	£299.99	£319.99	£359.99	£429.99
68060/50MHz (inc. FPU)	£399.99	£429.99	£449.99	£489.99	£559.99

SCSI-II Interface for the Magnum 68030/68040 & 68060 Cards - Supplied with software - **£79.99**

560DPI 3 BUTTON MICE & MATS

for all Amigas & Atari STs

FREE THIRD BUTTON DRIVER DISK



AWARD WINNING 560DPI RESOLUTION ♦ 90% RATING IN CU AMIGA ♦ MICRO SWITCHED BUTTONS ♦ AMIGA/ATARI ST SWITCHABLE ♦ ALL 3 BUTTONS CAN BE USED WITH MANY PROGRAMS SUCH AS DIRECTORY OPUS 5

BEIGE OR BLACK **£12.99**

MAT **£2.99** OR **£1** WITH A MOUSE

BSB

Books & Videos

INSIDER GUIDE - A1200	£14.95
INSIDER GUIDE - A1200 NEXT STEPS	£14.95
INSIDER GUIDE - ASSEMBLER	£14.95
INSIDER GUIDE - DISKS & DRIVES	£14.95
INSIDER GUIDE - WORKBENCH 3 A TO Z	£14.95
TOTAL! AMIGA - WORKBENCH 3	£19.99
TOTAL! AMIGA - AMIGADOS	£21.99
TOTAL! AMIGA - AREXX NEW	£21.99
TOTAL! AMIGA - ASSEMBLER	£24.99
MASTERING AMIGA SCRIPTS	£19.95
MASTERING AMIGA BEGINNERS	£19.95
MASTERING AMIGA PRINTERS	£19.95
MASTERING AMIGADOS 3 - REFERENCE	£21.95
MASTERING PROGRAMMING SECRETS	£21.95
UK COMMS/INTERNET **** STAR BUY ****	£14.95
AMIGADOS PACK	£34.99
TOTAL! AMIGA - AMIGADOS & MASTERING AMIGADOS 3 - REFERENCE USUALLY £43.94 - SAVE NEARLY £9	
A1200 BEGINNER PACK 2 BOOKS (INSIDER A1200 & NEXT STEPS), A 60 MINUTE VIDEO, 4 DISKS OF PD TO GO WITH THE BOOKS/VIDEOS	£39.95
A1200 WORKBENCH 3 BOOSTER PACK 2 BOOKS (DISKS & DRIVES & WORKBENCH 3 A TO Z), A 90 MINUTE VIDEO, 1 DISK & REFERENCE CARD	£39.95

GP FAX

Fax Software Solution for all Amigas with a Modem

SEND FAXES TO AND FROM YOUR AMIGA. EVEN FAX DIRECTLY FROM YOUR APPLICATION. AMIGA FORMAT GOLD. AMIGA COMPUTING 9/10. FAX COMPATIBLE MODEM REQUIRED **£44.99**

IMAGE FX 2.6

The Complete Image Processing Solution for all Amigas

THE BEST IMAGE PROCESSING PACKAGE THERE IS FOR THE AMIGA. AMIGA FORMAT GOLD - CU AWARDS. BUBBLE FILTER, FIRE FX, WIRELESS HOOKS, SHEAR & STRAW MODES, ENHANCED LIGHTNING EFFECTS, FILMGRAIN ADD/REMOVE, LIQUID DISTORTION, SPONGE DRAWMODE, SPARKLE EFFECT & MUCH MORE ARE IN VERSION 2.6.



2MB & HARD DISK REQUIRED **£179.99**

QUARTERBACK DISK SUITE

Quarterback 6.1 & Quarterback Tools Deluxe

THE CLASSIC QUARTERBACK 6.1 AND QUARTERBACK TOOLS DELUXE ARE BACK ON SALE. CONSIDERED BY MOST AS *THE* DISK BACKUP AND DISK RECOVERY PROGRAMS WE HAVE AVAILABLE THE TWO PACKAGES COMBINED AT AN UNBELIEVABLE PRICE (NORMALLY £79.99). DISK BACKUP, DISK RECOVERY & OPTIMISATION ARE TWO KEY TASKS THAT JUST SHOULDN'T BE LEFT TO INFERIOR PD ALTERNATIVES.

GET THE BEST *GET THE QUARTERBACK DISK SUITE.* **£34.99**

SATURN

External 1Mb Floppy Drive for all Amigas

FREE OPUS 4.12 WORTH £50

FREE 3 GAMES WHILE STOCKS LAST



COMPATIBLE WITH ALL AMIGAS ♦ HIGH QUALITY SONY DRIVE ♦ ROBUST METAL CASE ♦ ANTI-CLICK AS STANDARD ♦ ENABLE/DISABLE SWITCH ♦ LOW POWER CONSUMPTION ♦ THRU PORT FOR EXTRA DRIVES **£39.99**

OR **£49.99** WITH POWERCOPY PRO 3 - THE BEST BACKUP SYSTEM

POWERBOX NEW

250w Amiga Power Supply

POWER-UP YOUR AMIGA WITH THIS 250W ENHANCED AMIGA PSU FOR LITTLE MORE THAN THE PRICE OF A NORMAL 25-30W AMIGA PSU! DESIGNED FOR A500/600 & 1200. ENCASED IN STEEL SUBSYSTEM, ALL CABLES SUPPLIED, MONITOR OUTLET ON BACK OF PSU, ONLY QUALITY/NEW PSU'S USED, 3.5" & 5.25" POWER CABLE AVAILABLE TO POWER EXTERNAL CD-ROMS, HARD DISKS ETC. **£49.99**

PRO SYSTEM

Complete A1200 Hard Disk Kits

FREE OPUS 4.12 WORTH £50

3 YEAR WARRANTY

YES, AT LONG LAST, A PROFESSIONAL WAY TO INSTALL A HIGH CAPACITY HARD DISK WITHOUT CARDBOARD & GLUE! OUR PACKS OFFER YOU OUR EXCLUSIVE AND COPYRIGHTED BRACK-IT 1200 FITTING SYSTEM & A CHOICE OF HIGH SPEED/LOW COST HARD DISKS.

BRACK-IT 1200 FITTING SYSTEM

DESIGNED TO ACCOMMODATE THE NEWER DRIVES ON THE MARKET OFFERING HIGH CAPACITY & SPEED AT GREAT PRICES. OUR PACK INCLUDES ROBUST STEEL FITTING BRACKETS, ALL CABLES FOR POWER AND DATA, INSTRUCTIONS & 7 DISKS FULL OF HOT SOFTWARE SUCH AS DIRECTORY OPUS 4.12 (WORTH £50), MUI 3, MCP, GALAGA AGA, VIRUS CHECKER, MODS, REORG, ABACKUP AND MUCH MORE. ALL SOFTWARE CAN BE INSTALLED WITH OUR CUSTOM CLICK 'N' GO SYSTEM. ALL DRIVES ARE PRE-INSTALLED WITH THE SYSTEM SOFTWARE & ABOVE DISKS - UNLIKE OTHERS WE PROVIDE THE DISKS JUST IN CASE!

FREE UK DELIVERY

1.0GB £149.99

1.2GB £169.99

INCLUDES BRACK-IT SYSTEM (NORM. £35) & UK DELIVERY

REPAIRS

by Qualified Technicians

PRICES INCLUDE COLLECTION & DELIVERY

- ALL AMIGA COMPUTERS COVERED
- PRICES FROM AS LITTLE AS £29.99
- MANY REPAIRS BY WIZARD REQUIRE NO PARTS
- PRICES INCLUDE INSURED COURIER *COLLECTION & DELIVERY*, LABOUR, FULL DIAGNOSTICS, SERVICE, SOAK TEST & VAT.
- FAST TURNAROUND
- ALL TECHNICIANS ARE FULLY TRAINED & QUALIFIED
- UPGRADES BOUGHT AT SAME TIME FITTED FREE!
- 90 DAYS WARRANTY ON ALL REPAIRS

ALL FOR JUST **£29.99** + PARTS

OTHER PRODUCTS

A500 512K RAM EXPANSION	£14.99
A500PLUS 1MB RAM EXPAN.	£19.99
A600 1MB RAM EXPANSION	£19.99
ALL WITH A FREE OPUS 4 WORTH £50	
4MB 72-PIN SIMM	£30
8MB 72-PIN SIMM	£50
16MB 72-PIN SIMM	£90
32MB 72-PIN SIMM	£160
ALL SIMMS ARE NEW AND HAVE A 1YR WARRANTY	

EASYLEDGERS 2 - THE ONLY FULL ACCOUNTS PACKAGE, LEDGER BASED ACCOUNTS SYSTEM, AMIGA FORMAT GOLD *CALL ABOUT TRIAL OFFER*

HARD DISK & 2MB RAM REQUIRED **£119.99**

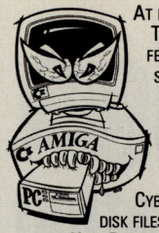
33MHz FPU KIT - PLCC TYPE FPU & CRYSTAL - WILL FIT MOST CARDS - CALL TO CONFIRM. **£29.99**

DISKS

50 DISKS & COLOUR LABELS	£14.99
100 DISKS & COLOUR LABELS	£24.99

PC TASK 4.0

Advanced 486 PC Software Emulator



NEW

AT LAST, THE LONG AWAITED PC TASK 4.0 IS NOW SHIPPING FEATURING:- ADVANCED 486 SOFTWARE ONLY EMULATION, DYNAMIC COMPILATION FOR FASTER EMULATION, UP TO 16MB ACCESSIBLE UNDER MS-DOS, MDA, CGA, EGA, VGA & SVGA SUPPORTED, UP TO 256 COLOURS ON AGA MACHINES, CYBERGRAPHICS SUPPORT, MULTIPLE HARD DISK FILES AND PARTITION SUPPORTED, CD-ROM AND HIGH DENSITY DRIVES SUPPORTED, RUN MS-DOS APPLICATIONS IN A WINDOWS ON YOUR WORKBENCH! RUN WINDOWS 3.1 IN ENHANCED MODE! MANY TIMES QUICKER THAN VERSION 3.1!

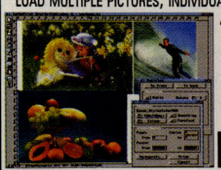
REQUIRES KICKSTART 2.0 AND A 68020 PROCESSOR OR BETTER.

CALL ABOUT UPGRADES **£69.99**

TURBOPRINT 5 NEW

Printer Enhancement Software

IF YOU HAVE A PRINTER - YOU MUST GET TURBOPRINT. IT RADICALLY ENHANCES THE PRINTOUTS YOU NORMALLY GET BY REPLACING THE AMIGA PRINTER SYSTEM WITH THE FASTER AND VISIBLY BETTER TURBOPRINT SYSTEM. OPTIONS INCLUDE POSTER PRINTING, COLOUR CORRECTION, DITHERING, COLOUR BALANCING, ON-SCREEN PREVIEW AND MUCH MORE... MOST PRINTERS ARE SUPPORTED -CALL TO CHECK. STOP PRESS - VERSION 5 NOW INCLUDES "GRAPHICS PUBLISHER" TO LOAD MULTIPLE PICTURES, INDIVIDUAL COLOUR CORRECT, ROTATE, TWIST AND MORE. ENHANCED TRUEMATCH COLOUR CORRECTION, NEW DRIVERS FOR HP, CANNON & CITIZEN MODELS.



£49.99

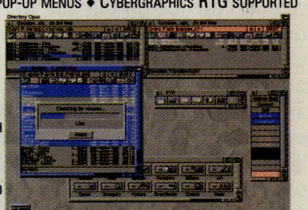
CALL ABOUT UPGRADES

DIRECTORY OPUS 5

WORKBENCH REPLACEMENT & FILE MANAGEMENT SYSTEM



THE BEST JUST GOT BETTER! AFTER 12 MONTHS OF FURTHER DEVELOPMENT OPUS 5.5 IS NOW READY AND SHIPPING. STUNNING NEW FEATURES INCLUDE:- ♦ ICON ACTION MODE ♦ WORKBENCH REPLACEMENT MODE DRAMATICALLY ENHANCED ♦ OPUSFTP CAPABILITY TO ACCESS INTERNET FTP SITES WITH A LISTER ♦ BORDERLESS BUTTON BANKS ♦ FILETYPE-SPECIFIC POP-UP MENUS ♦ CYBERGRAPHICS RTG SUPPORTED ♦ INDEPENDENT HOTKEYS ♦ SCRIPT SYSTEM TO EXECUTE COMMANDS UPON EVENTS ♦ MULTIPLE CUSTOM MENUS WITH SUB ITEMS ♦ AUTOMATIC FILETYPE CREATOR TO CREATE AND TEST FILETYPES WITH EASE ♦ A FONT VIEWER ♦ LISTERS FIELDS FOR TITLES, RE-SORTING BY FIELDS, PLUS A 'VERSION' FIELD ♦ COLOUR RE-MAPPING OF BUTTON/ICON IMAGES WITH SUPPORT FOR 'MAGIC WORKBENCH' ETC. ♦ SELECTIVELY HIDE UNWANTED DRIVE ICONS ♦ CLIPBOARD SUPPORT FOR CUT, COPY AND PASTE IN GADGETS & LISTERS ♦ RESIZE, ICONIFY, AND SCROLL BUSY LISTERS WHILE BUSY ♦ ICON AND LISTER SNAPSHOTS ARE STORED SEPARATELY FROM WORKBENCH - SO YOU COULD SNAPSHOT YOUR CD-ROM ICONS! ♦ LISTERS CAN NOW DISPLAY A BACKGROUND PICTURE/PATTERN ♦ INTERNAL OPUS CLI TO QUICKLY TEST COMMANDS & AREXX SCRIPTS ♦ MANY NEW INTERNAL COMMANDS AND MANY NEW AREXX COMMANDS HAVE BEEN ADDED OR EXTENDED WITH NEW FEATURES. YOU CAN NOW EVEN ADD YOUR OWN INTERNAL COMMANDS!



AMIGA GOLD FORMAT

VERSION 5.5

£49.99

Workbench 2+& Hard Disk Required

WIZARD DEVELOPMENTS

FREE UK DELIVERY

FREE UK DELIVERY

ORDER HOTLINE

01322-527800

OR FAX 01322-527810

ACCESS VISA SWITCH

CONTACT US ON INTERNET SALES@WIZARD-D.DEMON.CO.UK

BETWEEN 9AM AND 5.30PM, MONDAY TO SATURDAY, TO PAY BY CREDIT CARD. TO PAY BY CHEQUE OR POSTAL ORDER PLEASE SEND YOUR ORDER TO - WIZARD DEVELOPMENTS, PO BOX 490, DARTFORD, KENT, DA1 2UH

Cheques should be made payable to WIZARD DEVELOPMENTS. Prices include VAT & carriage to the UK mainland. Please add £5 to your order for EC destinations and £10 for other countries. All products are subject to availability. E&OE. Advertised prices & specification may change without notice. All sales are subject to our trading conditions - copy available on request.

ENTERPRISE

Desktop Workstations for all Amigas



SINGLE WORKSTATION 507 x 95 x 315MM ~~£29.99~~ **£24.99**

DOUBLE WORKSTATION 507 x 155 x 315MM ~~£34.99~~ **£29.99**

WIDE WORKSTATION 665 x 95 x 315MM ~~£34.99~~ **£29.99**

ALL SIZES ARE W x H x D

£5 OFF FOR A LIMITED PERIOD

Amiga in Education

"The Australian-based Amiga Education Network (TAEN) was established in response to Commodore Australia's demise as a means of supporting the Amiga platform in the schools that were using it," Basil Flinter, the Network's convener has told ***AUI***.

In the hope that there would be a speedy resolution to the survival of the Amiga and, as a consequence, to its survival in the critically important education market, TAEN are hoping that - should 1997 will see the Amiga rescued - the new owners will appreciate the importance of the education sector and continue to provide a low cost (A1200HD-based) Amiga for this market.

They also wish to invite comments from those in the Amiga community who have an interest in the Amiga in education and to seek out those who would be prepared to act as National Representatives for their country within TAEN.

"The purpose of The Amiga Education Network," said Basil Flinter, "is to provide an Amiga-based global facility open to all persons or organizations with an interest in the Amiga in the field of education in any country, via national representatives, through which information about the Amiga, relevant to that country's education, can be disseminated and exchanged."

Matters to be covered by TAEN include: offering advice on the latest Amiga software (including upgrades) and hardware (including peripherals); offering advice on the use of any Amiga hardware or software, or on any Amiga matter appropriate to the enquirer's needs; supplying names of appropriate contacts; arranging for suitable demonstration(s) of, and training in, Amiga education products; publication of regular newsletters; Identifying areas of need, and advising developers and publishers about them; and, most importantly, promoting direct interaction (including an interchange of ideas on how to use the Amiga) among educational institutions and between individuals, teachers, lecturers, and educationalists.

Each country that participates in TAEN, it is proposed, will have its own National Representative, whose role will include acting as a point of referral, within their own country; assisting in developing and expanding The Amiga Education Network both nationally, and - through the Convener (whose role includes that of global co-ordinator) - internationally, so as to increase TAEN's usefulness to those using it and to those developing product for it.

TAEN would also like to see it to promote and arrange for the assessment of suitable Amiga education product for that country; to arrange for the production of a regular Amiga-specific education publication in that country; and to liaise with the Convener so as to benefit the Amiga in education globally and, in particular, to advise the Convener of the special education needs for that country.

Contact: Basil Flinter, The Amiga Education Network, P.O. Box 353, Armidale, N.S.W. 2350, Australia. Tel. 61+ 67 72-2100 Eml. flinter@tpgi.com.au

Virtually the End?

Last month this NewsFile reported on the demise of Virtuality, a virtual reality company that was started using Amigas. Now news reaches us that their main rival, UK-based Division, is also in trouble. The company saw turnover rise to £4.9 million in its financial year ended October 1996, but losses also increased to £4.57 million. It doesn't take an accounting expert to see that there appears to be very little money - or at least profits - in VR. Consequently, Division say they have moved out of the hardware business and are now concentrating on the software side. Is VR as a business virtually over with?

Quaking in Our Boots

After many previous rumours, it looks like the PC shoot-'em-up game Quake is finally coming to the Amiga. At present there is reported to be a prototype version which requires an Amiga equipped with an 060 chip for reasonable speed, 8Mb of RAM, and at least 50Mb of hard disk space. However, these requirements are expected to be lowered when the final release appears. 060 and 8Mb? They had better be...

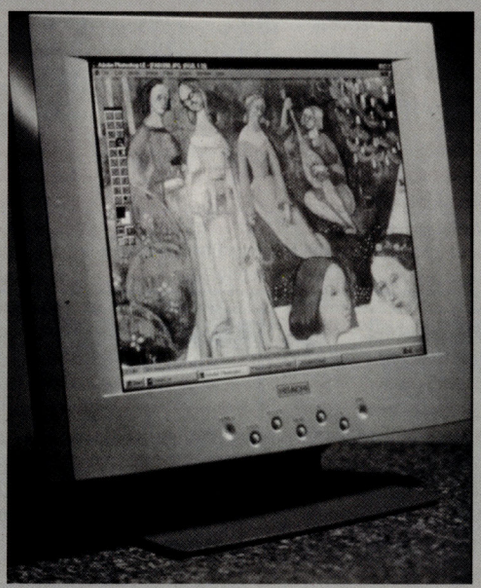
GVP RESCUE

News reaches us of a new company in the States offering to repair all kinds of GVP products such as SCSI controllers and 24-bit video cards.

Contact: GVP-Rescue 73143.231@compuserve.com.

Super TFT

As was reported in last month's ***AUI*** Samsung Special Report, there are changes happening in the hundred year old world of the cathode ray tube. Not so much changes as the beginning of the end for the old and useful CRT. It isn't just Samsung, but others too who are plotting its downfall. The next it seems is to be Hitachi. They have told ***AUI*** that they have developed the world's first 13.3" Super Thin Film Transistor (TFT) colour LCD monitor and what's more are putting it on the market.



The Hitachi-designed Super-TFT is, they say, a completely new display technology for computer monitors. It is claimed to offer higher clarity, wider colour range, large viewing angle, and lower power use and emissions as well as being more ergonomic than earlier LCD and conventional CRT monitors.

The 13.3" screen is claimed to be the equivalent in viewable size to a conventional 15" monitor. Hitachi say they have achieved this by developing a sophisticated algorithm-based switching technology which enables the monitor to have a maximum display of 16.9 million colours.

Hitachi say that until recently the viewing angle for LCD displays was small, making viewing difficult and restricting ways in which LCD could be used. They claim that their new technology overcomes this and allows the LCD screen not to have the vertical viewing angle of earlier LCDs, which was as low as 35 degrees, but lets their new monitor have a plus or minus 70 degrees viewing in every direction. They also claim that fading, blurring, and the distortions that are often present in CRTs is absent in the new Super TFT monitor.

So what's the catch with all this brilliant new technology, we hear you cry? Yes, there is a catch, a serious one. It's the price. The price that Hitachi are asking for this little marvel is little short of marvellous - for them. It's a mere £2950 - and that doesn't include VAT.

Ah well, we can hope that, as usual, the price of new technology will fall and quickly - and it will. Watch that monitor space for Super TFT. It may yet come your way at a more affordable price.

Eyetech's Spring Specials: Mousemat £1; 17"Multisync monitor £399.95; Accelerators: '030/25MHz/FPU £79.95, '030 /50Mhz/autoconfig £119.95; 040/25MHz £199.95; '060/50MHz £439.95; Data/fax modems from £34.95; SX32Pro-50 £349.95; SX32MK2 £189.95; enhanced PSU's from £39.95; 100MB bootable IDE Zip drives £119.95; 3 months internet + 14.4 modem + s/w £79.95; CDPlus system from £139.95

The Top-Rated Eyetech *CDPlus* for the A1200 *2-speed and 8-speed* CDROM drives



The CDPlus and SyQuest EZ135 drives. The IDE Zip Drive is the same size as the EZ135

What do the reviewers say?

Amiga User International - *97%*
"... It all worked faultlessly ... "

Amiga Format - *96%*
"... An absolutely superb bit of kit.."

Amiga Shopper - *90%*
"... This is a quality product..."

- √ **2- or 8- speed external CDROM unit in quality CE-approved case with heavy duty PSU**
- √ **Leaves trapdoor free for accelerators / memory expansion and the PCMCIA slot free for digitisers, modems, samplers etc**
- √ **Option to add additional HD's, CDRoms, SyQuests, *IDE Zips*, Jazs, ATAPI tape streamers etc powered from the CDPlus unit**
- √ **Comes with special Eyetech *'060-compatible* Mk2 4-device EIDE buffered interface board - easily fitted in minutes with no cutting/drilling (Note that IDE CDROMS *must never* be directly connected to the A1200 without a buffered interface)**
- √ **Gold plated audio phono sockets* at rear and front panel headphone socket and volume control**
- √ **Complete with 'Click-and-Go' installation software**

Amazing Value - Prices Down
8-speed - *only £189.95*
Special Purchase - Limited Availability:
Upgradeable* 2-speed - *just £139.95
The *CDPlus* is also available as a full kit but without CD mechanism - so you can fit your own - for £119.95



The CDPlus MiniTower & Desktop cases (styles may vary)

Considering a PowerStation?* The CDPlus is now available with an alternative, 230W, CE-approved, PC MiniTower or Desktop case (which can also power your A1200) - *for only £25 extra (*Not on DT/MT)

SX32Mk2 & SX32Pro *Internal* Expansion for the CD32

The SX32 Pro is now shipping! Make your CD32 into a high powered, portable Amiga!

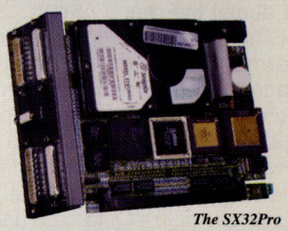
The SX32Pro and SX32Mk2 add ...

- √ 33 or 50MHz '030 MMU CPU and FPU socket (33Mhz FPU socket only on the SX32Mk2)
- √ Simm socket for up to 64MB of 32 bit fast (60/70ns) RAM (up to 8MB fast (70ns) RAM on the SX32Mk2)
- √ Buffered IDE interface for internal 2.5" hard drive ***and*** second hard drive, SyQuest, Jaz *or even 8 speed CDROM* (optional extra on the SX32 Mk2)
- √ Sockets for RGB video (23 pin), VGA video (15 pin), Parallel port (25 pin), Serial port (25 pin), Floppy disk port (23 pin)
- √ Jumper-selectable for PC or Amiga keyboard input (external adapter on SX32Mk2)

... to the CD32's existing mouse, joystick, keyboard, audio, RF, composite video and SVHS ports.

What do the reviewers say?

Amiga User Int'l	*"95% - Definitely Recommended"*
Amiga Computing	*"90% - A Dream to Use." Blue Chip Award*
Amiga Format	*"93% - A Job Well Done" Gold Award*



The SX32Pro

SX32Mk2 - *sale price* - £189.95
SX32Pro-50 - *sale price* - £349.95
Genuine Amiga 89-key compact keyboard £34.95
SX32 floppy, hard drives 20MB-1.1GB, RAM - *Please ring*

All models include full pictorial fitting instructions,WB3.0 & utilities on CD and 'Click-and-Go' hard drive installation diskette

Just a few SX32 Combo packs left - SX32 Mk2 or Pro-50, CD32, keyboard, 4MB memory, hard drive and enhanced power supply - at unbeatable prices!

AMIGA HEALTH WARNING

If you have recently fitted - or intend to fit - an IDE/ATAPI CDROM to your A1200 *(other than an Eyetech CDPlus unit)* **without** a buffered interface then your Amiga is in risk of serious damage arising in the future. The A1200 - unlike A4000's and PC's - has ***NO*** internal IDE buffering. On the A1200 the IDE interface connects ***directly*** to the A1200 processor chip which itself has insufficient output to drive more than one IDE/ATAPI device (and only then on a short data cable) for any sustained time period. To the best of our knowledge the ***Eyetech CDPlus*** is the only A1200 ATAPI CDROM supplied with a buffered interface as standard. We are now making this 4-device buffered interface available separately for use with other kits and D-I-Y CDROM installations. At only £39.95 it is a small price to pay to preserve your Amiga's health.

Mk2 interface now available - Compatible with all popular hard drives and accelerators - including '060 models

LOOK! 17"Microvitec Multiscan Monitor 15-64KHz, 50-120Hz
All Amiga/PC scan modes to 1280x1024, Autoswitching **£399.95!!!**

Superb *Amiga* Internet packages *from Eyetech*

The following GetConnected packages are now available from Eyetech:

- √ ***Expert pack. Three months unlimited Internet***, access with ***1 MB*** of your own World Wide Web space, 60-minute continuous-use-restricted ***Web, FTP, IRC, news and email*** software, Internet reference book and ***24hr technical support*** from NETCOM. Designed for existing comms users - ***Just £39.95***

Complete Software
- √ Customised Amiga software
- √ 'Click and go' installation
- √ All-inclusive *'GetConnected'* hardware/software/Internet bundles ***only*** from Eyetech

Complete Access
- √ Local telephone dial-up
- √ Nationwide coverage
- √ Quality network connectivity

- √ ***A1200 Starter pack. As Expert pack - plus V32 (14.4) modem*** (upgrade to V34(28.8Kbps) fax/data modem - £40.00), all cables, full installation instructions and software on diskette
This package is tailor made A1200 users who want to get on line at minimal cost - ***Just £79.95***

Complete Support
- √ 24 hours a day
- √ 7 days a week
- √ Total subscriber service

- √ ***High speed pack. As Expert pack - plusV34 + (33.6) fax/data modem*** , all cables and full installation instructions - ***Just £119.95***

Complete Value
- √ No start-up fee
- √ Unlimited usage
- √ Fixed monthly charge

- √ ***Other options available - Please ring for details***

NETCOM and NETCOMPLETE are trademarks of NETCOM Online Communication Services Inc.

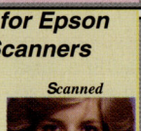
BT ISDN LINE NOW ONLY £199!!!

The Eyetech ZorroII ISDN Adapter gives you high speed Web-browsing and video conferencing on your Amiga for *only £189.95*

Amiga Driver Software for Epson Colour Printers and Scanners

EnPrint for the Stylus ColourII/IIs/ Pro/ProXL/200/500/800/820/1500
- √ Unbelievable photographic quality output
- √ 'Preferences' ***&*** stand-alone printing program

Scanned



ScanQuix for all Epson scanners
- √ 24 bit scanning with full range of editing options
- √ 'Scan-to-disk' option in Jpeg or IFF formats
- √ Stand-alone use or integrates with your Art package *printed output*
- √ Also available for HP, Mustek and Artec scanners

EnPrint v2.1.3 printer driver - only £29.95
ScanQuix v3.0 scanner s/w - only £79.95

The Amazing Iomega *IDE* Zip Drive

Another first from Eyetech

- √ *Can be used in place of - or as well as*- the internal hard drive*
- √ *Use a different bootable cartridge for each application or family member*
- √ *Ideal for transferring multimedia data between Amigas and/or other platforms*
- √ ***Fits in any Amiga/desktop/minitower floppy drive bay or in external case***
- √ *The ideal way to backup your data*

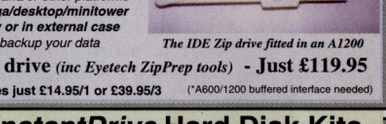


The IDE Zip drive fitted in an A1200

Bare IDE Zip drive *(inc Eyetech ZipPrep tools)* - Just £119.95
100MB Zip cartridges just £14.95/1 or £39.95/3 (*A600/1200 buffered interface needed)

A1200 *InstantDrive* Hard Disk Kits

***InstantDrives* are *only* available from Eyetech**



"The fastest drive I have tested on any platform ...95%"
- David Taylor - Amiga Format February 1997

Important Note! 3.5" hard drives - even those described as *'Slim'* - are usually 1"/25mm high and ***will not*** fit in an A1200 without significant modifications to the case and metal shielding - which itself reduces the value of your computer. All ***InstantDrives*** from Eyetech are less than 20mm high and fit perfectly.

- √ Rated ***99%*** - AUI November 1996, ***95%*** - Amiga Format February 1997
- √ No hole drilling, case clipping, or shield removal required
- √ All drives are brand new with a 2 year warranty and come Inclusive of full fitting kit and easy-to-follow pictorial instructions
- √ Ready-to-use with WB3.0 and over 45 top quality utilities installed and configured to the Toolsdaemon menu system.
- √ AV drives come with a fully licenced version of Optonica's MMe multimedia authoring software ***AND*** internet access software (shareware) preinstalled

2.1 GB AV £229.95 2.5 GB AV (~3MB/s) - £239.95

D-I-Y and Bargain Corner

Hard-to-find parts for your Amiga project

Hard drive cables and cases	
2.5"-2.5" 44-way hard drive cables for A600 & A1200	£9.95
3.5" power & data cables for A600 & A1200	£14.95
3.5" full fitting kit for A600 & A1200 (contains ***everything***)	£24.95
3.5" external hard drive case	£19.95
3.5" removeable drive deluxe external HD case	£29.95
3 x 40-way IDE cable for 3.5" HD/CDROM ~85cm/2' 9"	£9.95
Custom 3 x 40 IDE cables to 1.5m/5' (enclose drawing)	£19.95
3.5" hard drive to 5.25" bay mounting adapters	£6.95
2.5" hard drive to 3.5" bay with 3.5" data/power cable adapters	£12.95
3.5" floppy/SyQuest/Zip drive to 5.25" bay mounting adapters	£6.95
40 pin m-f detachable data cable forexternal 3.5" HD/CDROM's	£12.95
Slimline external floppy/IDE SyQuest/IDE ZIP/IDE Jaz case	£12.95
CDROM cables, cases and interfaces	
IDE/ATAPI CDROM case with 40w PSU, audio & data connect's	£59.95
4-device buffered EIDE interface for A1200/A600	£39.95
4-device EIDE interface & cable assembly for A4000	£39.95
44-way to 44-way + 40-way unbuffered IDE interface/adapter	£19.95
Audio, video, modem and phone cables	
3.5mm stereo jack plug to 2 x phono plugs for CDROM	£6.95
CDROM standard 4 pin inverted T audio connector & phono plugs	£9.95
Phono plug x 2 to phono plug/socket x 2 audio mixer leads	£6.95
2 x phono socket to phono plug mixer adapters (Gold £3.50)	£2.50
25 way F to 25 way M modem cable (1m)	£5.95
Stereo 2 x phono plug to 2 x phono plug 1.1m/4' (4.8m/16' £9.95)	£4.95
10m/30' telephone extension cables with 2 way phone adapter	£9.95
Power supplies and PC towers//desktops with integral psus	
Enhanced metal cased PSU for A600/A1200/CD32/CDROM/ external HD (fit your old lead - instructions provided)	£39.95
200W Ready-to-Go A500/600/1200 psu w/ Amiga, mains cables	£59.95
Mini-tower or desktop case with 230W PSU, CD & HD/Zip bays	£59.95
4-pin M-F extension cable from PSU to external HD/CD 0.9m/3'	£9.95
23 pin m floppy drive connector to 4 pin HD/CDROM power plug	£9.95
A1200 internal cooling fan - dissipate that extra power!	£19.95
VGA 23-15 pin adapter for A500/600/1200 (most monitors)	£12.95
23-15 pin buffered VGA adapter (all Amigas/monitors)	£24.95
GG2+ board - use PC cards in big-box Amigas	£129.95
ChipUp 1 to 2MB Chip RAMupgrade for A500/A1500/A2000's	£79.95
A2000 keyboards (new) for A2000/3000/4000* (*adapter +£5)	£59.95
50MHz capable PGA FPU for SX32Pro-50 or accelerators	£59.95
Videomaster PCMCIA concurrent sound+25fps video digtiser	£69.95
A1200 Workbench 3.0 disks (5) with WB3.0 & user manuals	£19.95

Two Major New A1200 Expansion Products from Eyetech

***PortPlus* - high speed serial and parallel port expansion**
- √ *2 x **460Kbaud** buffered serial ports with low CPU overhead*
- √ *PC & Amiga compatible parallel port transferring up to **500K bytes/sec***
- √ *Optional high speed PC-Amiga & Amiga-Amiga **networking software***
- √ ***Leaves PCMCIA & trapdoor free** ; accelerator friendly & very easy to fit*



PortPlus* introductory price - *just £99.95!

***Quickcam* for the Amiga**
- √ *Use a low cost **PC Quickcam** to capture IFF images on your Amiga*
- √ ***Fully multitasking** - including window resizing even whilst digitising*
- √ *Compatible with **all Amigas** with standard Amiga printer port & WB1.3+*

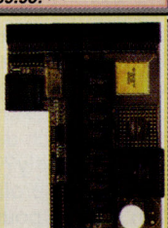


Quickcam* hardware adapter and software - *only £39.95!

Apollo Accelerators - Unbeatable pricing

Entry level A1200 Accelerators

25MHz '030 with MMU & FPU -*A real bargain at £79.95*
50MHz Turbo '030, MMU, 1 simm.*FPU option £119.95*
as above with 2 simm sockets (up to 64MB) £134.95



'040/'060 A1200 Accelerators (No A1200 tower needed)

25MHz Turbo '040 with MMU & FPU.	***- Only £199.95***
33MHz Turbo '040 with MMU & FPU.	***- Only £229.95***
40MHz Turbo '040 with MMU & FPU.	***- Only £259.95***
50MHz Turbo '060 with MMU & FPU.	***- Only £439.95***
SCSI interface *(for all Turbo's)*	***£79.95***

>>Special memory pricing with accelerator purchases<<
4MB* - £19.95; 8MB - £39.95; 16MB - £69.95; 32MB - £149.95 (60/70*ns)

2.5" InstantDrives for the A600, A1200, SX32 & SX32 Pro

21MB	Ideal for users of mainly CDROM software on the CDPlus and SX32	**£34.95**
344MB	A 2.5" drive ideal for the SX32Mk2 and for the A1200/A600	**£129.95**
810MB	A superb, superslim drive ideal for users of serious applications	**£189.95**
1.08GB	This top-of-the-range superslim drive is perfect for the SX32Pro	**£239.95**

This Months Sale Specials

Data/fax modems with phone cables, psu	
- V32 14.4Kbps fax & data	£34.95
- V34 28.8Kbps data, 14.4 fax	£79.95
- V34+ 36.6Kbps data, 14.4 fax	£89.95
20- pin Zip RAM 4x1Mbit chips 60ns for A3000, Octogon, '386 board etc	£9.95
A1200 RAM boards (clock, FPU skt)	£34.95
SCSI ext Zip drives w/PSU (no cart)	£129.95
SCSI cable 25wD(m)-50w Centr(m).1m	£9.95
Slim external floppy drives	£34.95
Stereo speakers (pair), amp & psu	£14.95
Metal CDROM case (no psu)	£5.95
Amiga microswitched mouse	£9.95
Amiga CDROM disks - our sel'n - 4 for	£10.00

Cocktel - from ProDAD

At Last - Professional Colour and Sound Videoconferencing - for all '030+ Amigas with HD & 6MB
- √ *Works with most Amiga sound & video digitisers (ProGrab, Vlab, Technosound etc)*
- √ *Works with 28.8 modems, ISDN etc*
- √ *Simultaneous text, video, audio & file tranfer*
- √ ***Ring/write for further details***

Full Cocktel software - £99.95
High quality colour conferencing camera - only £159.95

Eyetech Group Ltd

The Old Bank, 12 West Green, Stokesley, N Yorks, TS9 5BB, UK

Tel UK: 07000 4 AMIGA
01642 713 185
Tel Int'l: +44 1642 713 185
Fax: +44 1642 713 634
eyetech@cix.compulink.co.uk
http://www.eyetech.co.uk/~eyetech

Voted AUI Amiga Company of the Year 1996/7

EYETECH

Next Day delivery to EC and USA/Canada. Worldwide deliveries in 2-7 days from receipt of faxed order and payment details. (eg SX32 next day to NYC £25.30)

UK m'land 2/next day insured del'y charges: S/w, cables, buffered i/f £2.50/£3; 2.5" drives, accelerators, mem boards £6/£7; 3.5" drives, modems, psu's £8/£10; CDPlus £10/£12
Ring/fax/email for other delivery costs

UK bank/building society cheques, Visa*, Mastercard*, Switch, Delta, Connect, Postal/Money orders accepted. * A 3% surcharge is applicable to all credit card orders.

Due to space limitations some of the specs given are indicitive only - please ring/write for further details. Please check prices, specs and availability before ordering. If ordering by post please include a contact phone no. Goods are not supplied on a trial basis. E&OE.

All prices include VAT at 17.5%.
VAT is not applicable to non-EC orders

I SHALL SAY ZIS ONLY ONCE

Now here's something you almost certainly didn't know - and neither did we. A very helpful gent called Gert René Schmidt has informed ***AUI*** that DeltaGraph'X is "possibly the No.1 Amiga dealer in France" Wow!

The company apparently distributes products from notable German Amiga third-party manufacturers such as phase5, Macrosystem, Draco, ProDad, Eagle Computers, GTI, Village Tronic, IrseeSoft, and many others.

DeltaGraph'X also claim to produce their own products: DeltaTower was, it is claimed, the first Tower conversion for the A1200 and appeared in 1995. DeltaCam is said to be a video digitizer based on Apple's Quickcam unit, and TwinPowerStation is claimed as a PC/Amiga hybrid system based on the Siamese.

DeltaGraph'X organised the French AmigaShow '96 and will, they say, most probably do so again this year.

The company is currently looking for fresh products to distribute in France, so if you are an Amiga hardware or software producer, ***Contact: Gert René Schmidt Tel./Fax +33 (0)160841614.***

Sun Rescues Pre-Pentiums

With millions of 486 PCs still in use around the world, Sun Microsystems hopes to create a market for itself by developing a version of the Java OS, Java Virtual Machine, and Java Web Browser software so that companies can make use of obsolete kit, equipment that might otherwise end up in a skip.

Project Rescue, as Sun calls the scheme, will be rolled out this summer in an effort to block the success of Network Computers (NCs). Why buy a new NC when you can make use of an old PC? Why buy either?

Half-way in between

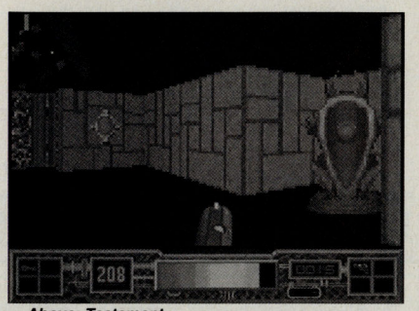
JTS, the hard disk manufacturer who claims to have been the first to supply super slimline 3.5" drives (that some Amiga dealers managed to fit within A1200s without any need for case modifications), has come up with a new size of drive. Their latest, they say, is a 3", yes 3" inch, IDE drive holding an amazing 2 gigabytes of data. And it is only 12.5mm thick.

Contact: JTS, 166 Baypointe Parkway, San Jose, California 95134. USA. Tel. +001 (408) 468 1800

Epic Proportions

Prolific CD-ROM publisher Epic Marketing have told ***AUI*** about the launch of a new games title. Islona is to be the name under which the company will, they say. promote thirty new game releases this year, ten of which are budget offerings at £7.99. The others are expected to be around the £25 to £30 mark.

There are four forthcoming titles. 'Sixth Sense Investigations' is a 7 disk or 1 CD adventure with the same feel as the PC game 'Day of the Tentacle'. The other three, 'Kargon', 'Testament', and 'Marbelous' are conversions of existing popular German games. 'Kargon' allows up to four players to compete to see who is the greatest sorcerer by surviving a quest through many dungeons and catacombs.





Above: Testament.
Below left: Sixth Sense Investigations.

Testament follows in the Gloom/Doom trend with your character having to despatch zombies while exploring a dungeon, and Marbelous is a puzzle game with 100 levels and a novel control system involving the mouse.

Cashing in their Chips

It used to be said by that old piratical entrepreneur Bernie Cornfeld that if you wanted to make money you shouldn't horse around with steel or lightbulbs or any such ordinary things, but you ought to get into the place to make money, the money business. He followed his own advice and in addition unit trusts, started such socially useful businesses as insurance companies and banks. He also said that he only worried about one principal or principle and that was his then girlfriend Victoria Principal, who at that time was, as they used to say, a coming starlet.

Money business? Forget it, times have changed. The hotshots in the City of London or on Wall Street might get bountiful bonuses but they don't compare with what comes your way if you are in the chip business.

Microprocessor maker, Intel seems to have topped the stockbrokers and the banks by awarding their employees a little matter of $820 million - about £500 million - in bonuses for 1996. The bonuses are, on average, worth about 33% of the base salaries of the employees. In addition, the top 26% of the workforce received highly valuable stock options which allowed them to buy Intel shares at specially low prices. That's a pretty useful perk, for Intel's shares have risen from about $60 in April 1996 to around $150 now.

How much did Intel have to make to shell out so generously? They took in just a shade over $5 billion in profits. That's a very pleasant £3 billion in used pound notes.

Oh yes, and they threw in 27 days of extra pay per employee and in case that wasn't enough, a $1000 "thank you" bonus too. If Intel's employees didn't have so much spare cash raining down on them they would probably say that their employer was so generous that people would start paying to work there. But then again, only already existing Intel employees could afford to.

PC beats TV

As PCs roll off production lines faster than TVs, a battle looms as to who will control the consumer's leisure time. Will it be the software houses or the TV companies? So claimed Intel president Andy Grove. However, what many 'experts' fail to see in the figures for PC shipments and TV sales is that they are two entirely different things, these being... most PCs go into offices and, TVs are cheaper than PCs. Also, once you've bought a TV, the 'software' for it is practically free. Is Intel going to encourage PC manufacturers to give it all away?

GASTEINER

0181 345 6000
Facsimile 0181 345 6868
18-22 Sterling Way, North Circular Road, Edmonton, London N18 2YZ

LONDON'S AMIGA SALES & REPAIR CENTRE

RAM CARDS

WE CARRY RAM CARDS FOR ALL AMIGA COMPUTERS AT VERY LOW PRICES

AMIGA A500

1/2MB A500+ 1MB	£15.99
1MB	£19.99

AMIGA A600

1MB	£19.99
1MB WITH CLOCK	£34.99

AMIGA A1200 RAM CARDS COME WITH CLOCK & FPU SOCKET

0MB	£29.99
1MB	£39.99
2MB	£49.99
4MB	£54.99
8MB	£79.99

BLIZZARD 1230 IV

0MB	£149
4MB	£169
8MB	£189
16MB	£209
32MB	£259

FPU

33MHz plcc	£10
50MHz pga	£50
crystals	£5.00

MEMORY SIMMS

At Gasteriner we have simms & memory for all ram cards & accelerators made for Amiga computers A500, A600, A3000,A1500,A2000 A4000

30PIN SIMMS	
1MB	£10
4MB	£25
72PIN SIMMS	
2MB	£9
4MB	£15
8MB	£22
16MB	£65
32MB	£119

SCANNERS

	EX VAT	INC VAT
GT 5000 EPSON	£350.00	£411.25
GT 8500 EPSON	£700.00	£822.50
GT 9000 EPSON	£600.00	£705.00

ARTEC 600DPI FLATBED SCANNER
with amiga software
£269.00 BEST BUY

HARD DRIVES

WE SELL HARD DRIVE FOR ALL AMIGA COMPUTERS. WE HAVE SCSI OR IDE HARD DRIVE TO FIT AMIGA A500, A600, A1500, A2000, A3000 & A4000 WHATEVER CONTROLLER YOU MAY HAVE? IF IN ANY DOUBT PHONE OUR TECHNICAL PEOPLE

SCSI

FASTEST DRIVES

	EX VAT	INC VAT
290MB INT SCSI	£50.00	£58.75
730MB INT SCSI	£99.00	£116.33
1.2GIG INT SCSI	£159.00	£186.83
2GIG INT SCSI	£285.00	£334.88
4GIG INT SCSI	£600.00	£705.00
730MB EXT SCSI	£130.00	£152.75
1.2MB EXT SCSI	£219.00	£257.33
2MB EXT SCSI	£300.00	£352.50
4MB EXT SCSI	£650.00	£763.75
8MB EXT SCSI	£999.00	£1173.83

IDE 3.5"

BEST BUYS

420MB	£99
850MB	£129
1.3GIG	£149
1.7GIG	£169
2.5GIG	£199
3.2GIG	£249

IDE 2.5"

SUPER SMALL HARD DRIVES

170MB	£69
340MB	£89
520MB/540MB	£129
810MB	£159
1GIG	£199
1.3GIG	£259
2GIG	£369

FAX & MODEM
NEW 33.6 WITH CABLES FOR ALL AMIGA £69.00

CD ROM & WRITERS

CD ROM	EX VAT	INC VAT
4 SPEED	£100.00	£117.50
2SPEED	£79.00	£92.82
8 SPEED	£200.00	£235.00
CD WRITERS		
PINNACLE	£549.00	£645.08
RICOH 2 SPEED	£329.00	£386.57
YAMAHA 4 SPEED	£629.00	£699.00



PRINTERS

EPSON 200	£119
EPSON 500	£249
EPSON PRO	£379
HP640	£249
HP870	£379

MONITORS

	INC VAT
MICROVITEC 14" (NEW)	£250
MICROVITEC 15"	£359
MICROVITEC 17"	£469
SHOP SOILED PHILIPS 8833	£119
SAMSUNG 15"	£259
SAMSUNG 21" (NEW)	£1059
SONY 15"	£329.00
SONY 17"	£586.32
GASTEINER 15"	£258.50
GASTEINER 17"	£419

BITS & BOBS

ZIP DRIVES	£149
JAZZ DRIVES	£420
SQUIRREL	£50
SURF	£89
SMD MPEG	£199
SCSI OKTAGON	£89
MULITIFACE III	£74.99
ALFAQUATRO	£55
IDE CONTROLLER FOR A500, A1500,A2000,A4000	£79

OFFER OF MONTH
SyQuest ezflyer 230MB
£199 INC VAT

ZIP, JAZZ & SYQUEST CARTS

ZIP CARTS	£15
EZ135 CARTS	£15
EZ230 CARTS	£23
JAZZ CARTS	£79
SQ 200 CARTS	£59

DELIVERY CHARGES

SMALL CONSUMABLES AND SOFTWARE ITEMS UNDER THE VALUE OF £59 PLEASE ADD £3.50 P&P.OTHER ITEMS EXCEPT LASERS, NEXT DAY COURIER SERVICE £10 PER BOX. OFFSHORE AND HIGHLANDS, PLEASE CALL FOR A QUOTATION. IN ADDITION WE OFFER THE FOLLOWING EXPRESS SERVICES: SATURDAY DELIVERY NORMAL RATE PLUS £15 PER BOX, MORNING, NEXT DAY NORMAL RATE PLUS £10 PER BOX, E&OE PRICES ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. ALL TRADEMARKS ACKNOWLEDGED. TRADERS TERMS & CONDITIONS AVAILABLE UPON REQUEST.

MakeCD 2.1 out now

MakeCD is an inexpensive program that allows you to create your own CDs... providing you have a CD Writer. This latest version of the German software package has many new features, among them being the ability to write data and audio CDs, including Mixed Mode and CD Extra; support of ISO9660, Rock Ridge, CDTV, and CD32 formats; reduced memory requirements; and a localized, font sensitive GUI with online help.

Many of the failures encountered using CD Writers are caused by the computer doing something else while writing software is 'burning' the gold writable CD-ROM disc. This can be as innocuous as running a screensaver program, or even clicking on a menu bar. Such an action temporarily can interrupt the writing and the gold disc becomes corrupted.

MakeCD, say its producers, has been designed from scratch to avoid these sorts of problems. It includes a test mode, so that you can assess the performance of your set-up prior to embarking on a writing session, and it works ansychronously. This means that the software should block any requests by the user or background tasks running on the Amiga until the burning session is completed. This, they say, ensures a continuous stream of data to the CD Writer and therefore reduces the chances of corruption.

MakeCD supports many CD writers. The following are already supported: Grundig CDR1001PW, Hewlett-Packard SureStore 4020i, Mitsumi CDR 2401, Philips CDD 2000 & CDD 2600 (beta), Plextor PX-R24CS, Ricoh 1420C, Smart & Friendly CDR1004, and the Yamaha CDR 100 & CDR 102.

If your CD Writer is not on the list, there is still a good chance that MakeCD will run it. The authors of MakeCD have released an almost fully operational version of the program via the Aminet, so you can try before you buy. Or you can visit http://www.uni-karlsruhe.de/~un60/MakeCD.html for a slightly limited, freely distributable version.

MakeCD's authors are also offering a special price to potential private purchasers of 80DM including shipping costs.

Contact: Katrin Schmidt, Finkenweg 26, 89233 Neu-Ulm, Germany Tel. +49 731 712316

Web Site For Voters

For the first time ever, up-to-date parliamentary constituency information is available to voters through Charter88's web site. Visitors can access the information without knowing their constituency - and the site takes account of boundary changes.

Visitors to the site can simply put in their postcode to access their constituency details, including names and contact addresses for MPs and Prospective Parliamentary Candidates. Campaign details for that constituency are also provided, including details of Charter88's Democracy Day meetings, 1990 Trust activity, Operation Black Vote meetings, and Stonewall lobbying activity.

Andrew Puddephatt, Director of Charter88, told ***AUI***: "We're delighted to provide an important service to voters, which allows them access to both information about candidates and campaign activity in their areas."

To visit the site go to: http://www.gn.apc.org/myvote or http://www.gn.apc.org/charter88

Wirenet's Web Space

Wirenet Amiga Internet, the UK's first Amiga-only Internet Access Provider, is now offering 5Mb of Web space to all their customers. Due to the expansion of their backbone provider, U-Net, and the installation of a new WWW server, Wirenet is now able to offer all their customers a large increase in WWW space and their own WWW address, in the form http://www.hostname.u-net.com, using whatever hostname they choose for their account. This change is for existing customers and all those opening new accounts.

Wirenet says it provides "a complete Internet solution for the Amiga owner by supplying up-to-date and fully supported software with a comprehensive installation and configuration package". This includes an integrated news and mail package, an Intuition controlled ftp program for downloading software and other files, and a World Wide Web browser. These are all controlled from a central control window that also takes of connecting and disconnecting from the Internet.

Wirenet also offer: Amiga specialised support by telephone and email, a full email address with own domain name and unlimited mailboxes, local call access throughout the UK, a 17:1 modem ratio, ways be able to connect, 33.6k modems for the fastest connections, unrestricted news feed, and an AmigaGuide introduction to the Internet, containing pointers to other sources of useful information

Their charges, which include VAT, are £14 for a one-off connection fee then an annual subscription of £115.

Contact: Neil Bothwick, Wirenet Amiga Internet, 99 Larch Avenue, Penketh, Warrington WA25 2AZ Tel. 01925 496482

Terabyte Anyone?

According to recent research, typical personal computer user hard drive capacity by the year 2000 will be ten to twenty gigabytes. The cost of this massive storage will have fallen, it is predicted, to 1.25 pence per megabyte.

However, in spite of the huge capacity of this kind that will be available, companies such as video on demand organisations, which have very high requirements, are considering DVD because they will need some 70 terabytes - that's 200 double sided 2.6 gigabyte discs.

A terabyte (Tb), as possibly you know, is 1024 gigabytes but the predictions are that the cost of this won't be more than £3000 by then. Although, in any case, new storage media, such as Pit Depth, Holographic storage, and Two Photon Memories - please don't ask us to explain that, we don't have two brains each yet - are on the way just to make our choice more complicated.

REALLY GUILTY?

The latest buzzword in the electronic world is "Guiltware". This interesting term is used to describe software that is bought by parents who are fearful of the future of their young 'uns in this everchanging electronic age. It means to most of these troubled Dads and Mums that they have to go out and buy Vicky or Nicky a PC and get the poor darling onto the Internet.

They don't generally feel so guilty when the box of tricks is installed and junior is apparently learning loads from Microsoft's latest Encarta, but they aren't so delighted when the phone bill comes in from all that surfing.

Guiltware? Is that what computer life really means today?

DVD-RAM

With DVD production hardly begun, Pioneer have demonstrated a DVD-ROM Writer capable of write-once recording onto $50 media. The $11,500 machine is expected to be taken up by "corporate disc writers" and "content developers" claim the company.

Meanwhile Toshiba have been talking about DVD-RAM, a 2.6Gb rewritable technology they hope will displace Iomega and Syquest from the removable drive/tape back-up market. Unfortunately, discs written on DVD-ROM machines cannot be read on DVD-RAM drives due to incompatibilities between the specifications. But nevertheless, DVD looks set to become, mark our words, that famous old favourite "the next big thing".

Siamese SYSTEMS

Siamese System V1.5

What is the Siamese System?

The Siamese System was designed to enable the computer user to have multiple platforms (Amiga WB3+, Windows 95, MacOS) appear as if they are a single machine, so as to make the user more productive. It does this by taking the two machines and a possible MacOS emulator on the Amiga. Once this is setup you operate one keyboard and mouse on all of your software, look at one suitable monitor that can handle all the screen modes you wish to use and then as far as you are concerned you just run software, you need not worry if that software is Win95, MacOS or Amiga software because it justs runs in front of you. Obviously this is backed up by the fact that the Siamese System has all of the drives from the different operating systems mounted within the Amiga Operating System so that you can share files instantly between applications.

With the standard pack, file transfer is via serial, but if you have a suitable SCSI card on the Amiga and PC and a shared SCSI drive for buffering, you can send the files via a very high speed SCSI network developed for and included in the standard Siamese System software. Rates of severa; Mb/sec. have been recorded with a high speed SCSI network setup between the machines. Please note that if you have the SCSI network installed you still need the Serial connection for the Siamese control software link.

You can cut and paste text between applications and other functions are available to make the system integrated, sharing of printers, programs like Winexe or MCI which allow the Amiga to launch PC applications from the Amiga or control PC MultiMedia devices, even from Dopus. There is also a full Arexx port for calling Siamese functions from other programs.

Another feature to be added in March as a low cost upgrade is RTG which is part of the Version 2 upgrade. This system opens Amiga screens on the PC graphics card enabling from 256 up to 16M colours, higher resolutions and a flicker free display for all Amigas with WB3+. Version 2 is also compatible with Windows NT4.



£149.95 inc Vat

Siamese System V1.5 voted Hardware Product of 1996 by Amiga User International

For more details please call HiQ or surf the Web.

!!! Video Toaster Owners and US Customers !!!
Please call Anti Gravity about Toaster Support.

So you want a Siamese System but need a PC?

Buy your Pentium PC from HiQ, the people who understand both the Amiga users needs and the advantages of using both platforms.



System components:-
Siamese System Version 1.5
Intel or Cyrix Processors.
Diamond Stealth 3D Graphics card.
Windows 95, Microsoft Works V4.
Ergonomic PC Keyboard.

The Price includes the Siamese Connection Kit worth £149.95
Packs include Windows 95 OEM CDRom and Microsoft Works v4
All Prices Include Vat

Intel Pentium Systems - Monitor not included

	P133	P150	P166	P200
16mb Ram	£899.95	£939.95	£1,059.95	£1,259.95
32mb Ram	£979.95	£999.95	£1,129.95	£1,329.95

Cirrus 686 Pentium class machines - Monitor not included

	P120	P150	P166	P200
16mb Ram	£849.95	£879.95	£899.95	£1,029.95
32mb Ram	£919.95	£949.95	£969.95	£1,099.95

!! Anyone Can Build A PC,
Only HiQ can Integrate It !!

All Siamese PC Systems include Siamese System v1.5, Mouse, Keyboard, 16mb EDO Ram, 1.2gb Hard Drive, Diamond Stealth 3D 2mb PCI Graphics card, 16 bit Sound card, 256k cache, Windows 95, Microsoft Works software.

The Siamese System is developed in the UK by HiQ Limited and Paul Nolan
German Distributor Eagle Computers tel +49 7191 300999 fax +49 7191 59057
US Distributors Anti Gravity inc. tel +310 393 6650 fax 001 310 576 6383

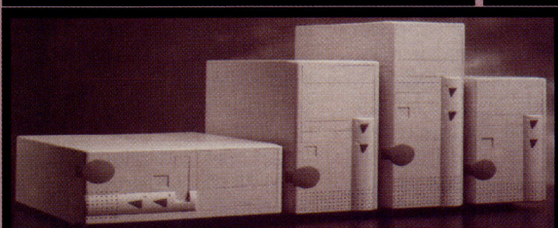
New Limited Edition Mk2 PowerStation - Only 75 Available!
SCSI or IDE Options with 8 speed CDRom's and Fast drives.

Mark 2 PowerStation Case Only
Main Features:-
1. **200 Watt power supply for A1200.**
2. **CE Approved components.**
3. **High quality construction. (Style may vary)**
4. **Five drive bays with all cables supplied.**
5. **Manual included for the PowerStation.**
6. **Internal SCSI cabling for upto 5 units.**
7. **IDE cabling for upto 2 units.**
8. **CD Audio output.**
9. **Monitor power switch pass thru.**
9. **Optional 120watt Stereo Speakers**

Case Only Price £99.95
All packs plus £12.50 shipping

Mark 2 PowerStation Pack
Budget SCSI - Pack Three
Limited Edition!!
Powerstation Mark 2 Case,
Amiga CD Title,
200watt Amiga pwr supply,
CD32 Emulation,
Standard Squirrel from Hisoft,
Dual Speed SCSI CDRom.
Only £199.95

Mark 2 PowerStation Pack Prices
Pro SCSI - Pack One
Powerstation Mark 2 Case, Amiga CD Title, 200watt Amiga pwr supply, CD32 Emulation, Surf Squirrel from Hisoft, 8 Speed SCSI CDRom.
Only £339.95
Budget IDE - Pack Two
Powerstation Mark 2 Case, Amiga CD title, 200watt Amiga pwr supply Samsung 8 Speed IDE CDRom
Only £199.95
Add a 1gb JTS for £150.00 with Pack Two



The Original PowerStation just gets better .....
So while others copy, we improve and move on!

!! A1200 3.5" STAR DRIVE BUYS !!
JTS 1gb Only £179.95 ULTRA SLIM
JTS 1.6gb Only £199.95 needs 200w pwr supply
JTS drives formatted, and Magic Workbench plus PD Software installed. Includes cable pack.
Fits as easy as a 2.5" Drive, call for details.
UK Post & Packing £7 (Citylink)
CDRom Drives

IDE 8 Speed Samsung	£ 99.95
SCSI 8 Speed Panasonic	£169.95
SCSI Drive	
1.2gb Quantum SCSI drive	£229.95



HiQ Ltd, Gable End, 2 The Square, Hockliffe, Bedfordshire, LU7 9NB
Email Address:- steve@hiqltd.demon.co.uk Web Site http:\\www.hiq.co.uk
All Prices include Vat, Please add 2.5% for Credit cards unless Connect and Delta versions.

TEL 01525 211327 FAX 01525 211328

HOW MANY?

Figures released for 1995 show that 65 million microprocessors compatible with the x86 Intel architecture were sold to computer manufacturers in that year. In contrast, the PowerPC architecture only managed 1 million sales.

Workstation chip makers Sun Microsystems sold just over 700,000 of their SPARC chips, while rival Silicon Graphics' MIPS range of chips sold 5.5 million. Although it must be remembered that these devices are also used in the Sony Playstation. With the launch of the Nintendo64 in 1996, which also relies on the MIPS chip, that figure has rocketed to over 19 million units in one year.

DEC sold 165,000 of its Alpha chips in 1995 and the report seen by ***AUI*** does not even mention sales of Motorola's 680x0 architecture. Oh dear. Could that mean that no-one was producing the Amigas that use those chips? We can't believe it.

Not Chickening Out



It looks like a Commodore, it must be a Commodore.

As ***AUI*** reported in April 1997 NewsFile, the phoenix of Commodore appears to have risen from the ashes. More information has reached us on the plans of this once dead chicken-headed bird. We hasten to add that this description does not refer to the member of the Commodore staff who seems to hold the key to its success in the UK. This is Sara McKee who is Commodore's new Marketing Director for both the UK and the rest of Europe. The highly business-like and attractive McKee knows something of the background to the Commodore saga, for she was a top staffer for Escom when it made its unhappy foray into the UK's high streets. It's not an experience she looks back on with any nostalgia.

She told ***AUI*** that the main outlet at present for Commodore PCs in the UK will be Comet, but there is also, she says, room for any other retail or wholesale customers providing they can offer the back-up for customers on which Commodore is insisting.

Sara McKee points out that the major problem for most PC buyers - see the story on Guiltware - is that they have a deeply felt fear of the computer, and what they need is the confidence that the company that sold them the machine will give them all the support they require.

Sara McKee is determined that the new Commodore will become known not only for the quality of the products its sells, but also for the continuing help it is willing to provide the buyers, particularly those new to the computer scene.

The Commodore machines, Sara McKee told ***AUI***, will be the best value they can provide. "We'll be bringing the latest technology to the consumer market and will be distributing a range of five systems including two MMX systems at a highly competitive price. For example, the latest Commodore Ultramedia is a 166MHz MMX system and will be coming out at £1699." Commodore PCs will shortly be available in ten European countries.

The Amiga world may look with some doubt on the real benefits of the unstoppable PC. However, if Amiga users are going over to the PC, and in some cases, at work for example, they often have no choice, for old times' sake, it won't be surprising if they choose - all things being equal - to have that funny old chicken head brand on the computer they buy.



Marketing Director McKee, lived through Escom to help revive the chicken head brand.

Sound Matters

Mouse mats have always been a popular computer accessory ripe for customizing. We've had square ones, rectangular ones, round ones, and rude ones. Mats in exotic shapes and colours too. Now Sound Tactics of Hook in Hampshire have told ***AUI*** they are launching a range of seemingly standard mouse mats onto an unsuspecting public. The difference with these is that they talk to you if to press on a highlighted area of the mat's surface. (What would the rude ones have said?)

Mats, say ST, can be supplied pre-programmed with animal sounds such as dogs barking or lions roaring, or you could opt for the screech of car brakes, the sound of breaking glass, and sirens. Although you would need three different mouse mats for that particular scenario.

No, you cannot, it seems, have the generally unmusical sound of air being expelled from human bodies, at either end.

Speech, say ST, can be programmed too. You can have your own sales message or jingle of up to 10 seconds duration or choose from a selection ST supply such as "Happy Birthday", "Merry Christmas", "I Love You", and so on. There are even nursery rhyme selections.

Contact: Don Hockman, Sound Tactics Ltd, The Old Stables, Lees Hill, South Warnborough, Hook, Hants. RG29 1RQ Tel. 01256 862733.

Meter Modems Off

In the early part of this decade great play was made of the fact that electric, gas, and water meters could have modems built in to them so that they could be remotely interrogated by the utility company for details of the meter reading. This would save the money, claimed the bean counters, that we currently pay to meter readers.

However, the service - which was operated by BT - proved too expensive for the utilities to operate and is now being discontinued after four years. Only a few hundred premises ever had the remote meters installed, and BT has decided to pull the plug - or shut off the meter modems - due to lack of demand.

CHIPPING AWAY AT THE GOOD LIFE

For those who have enjoyed one of the great holiday settings of our time, a certain sadness will overtake them. If that sounds like a translation from the French it is because we are feeling that way. For we have heard that the Club Mediterranee, that delight of the beach and beauty set is to change its way of accounting for the cashless holiday makers or "gentils membres" as they were called at this up-market Gallic Butlins of very exotic places.

The whole idea of "The Club" was that it allowed first French people and subsequently anyone with the money and sophistication to escape the travails of civilization to shelter in luxurious, sometimes, huts and get away from the nasty habit of carrying cash. The way they did it was through letting les gentils membres buy a set of beads that hung around their necks and took off to spend the appropriate amount on the little luxuries that they wanted extra to the all over care that was provided by the "Club Med" and its bathing costume-clad attendants.

Now today has caught up with this haven of the simpler style of yesteryear. The Club Med has decided to go electronic. Instead of the beads that dangled around all the suntanned necks and down into the generous cleavages that this early into the toplessness crowd revealed, there will be smart cards. Smart cards on the beach!

Smart cards will be issued to les gentils membres with which to pay for their cocktails in coconut shells, their magnums of Mumm champagne, their soupçons de foie gras. So, these days, even the distant resorts of the tres relaxés gentils membres are no longer safe from the incursions of serious technology. Shame!

Ah, as the ill-fated poet, executed at 24, Francois Villon - who never left France let alone toasted himself on Club Med beach at Tahiti - might have said "Ou sont les neiges et les gentils beads d'antan?" And, as they say about even lovely computers and even intelligent computer magazines, nothing is forever.

WE WILL BEAT OR MATCH GENUINE ADVERTISED PRICES

HARD DRIVES

3.5" EIDE 540mb	£115.99
3.5" EIDE 850mb	£125.99
3.5" EIDE 1 Gig	£145.99
3.5" EIDE 1.2 Gig	£155.99
3.5" EIDE 1.6 Gig	£169.99
3.5" EIDE 2.0 Gig	£229.99
3.5" EIDE 2.5 Gig	£249.99

Our hard drive prices are reviewed on a weekly basis - call for latest pricing

2.5" 80mb	£84.99
2.5" 420mb	£124.99
2.5" 1 Gig	£199.99

2.5" drives are subject to availability

ACCELERATORS

Apollo 1230 Lite	£89.99
Apollo 1230 Pro	£149.99
Apollo 1240/25	£219.99
Apollo 1240/40	£289.99
Blizzard 1230-IV	£159.99
Blizzard 1260	£569.99
SCSI -II kit for 1230	*£84.99*
Magnum 030/25	£89.99
Magnum 030/40	£129.99
Magnum 040/25	£239.99
Magnum 040/40	£319.99
Magnum 060/50	£479.99
SCSI -II kit for Magnum's	*£74.99*

MEM UPGRADES

A600 2mb Upgrade	£19.99
A1200 4mb Upgrade	£65.99
A1200 8mb Upgrade	£89.99
33mhz FPU w/crystal	£34.99
50mhz FPU w/crystal	£65.99

STORAGE

Iomega ZIP Drive SCSI	£134.99
ZIP Cartridges (each)	£12.50
SyQuest EZ Drive SCSI	£134.99
Iomega JAZ Drive SCSI	£Call
JAZ Carts (1gig each)	£Call

MEMORY SIMMS

72pin 4mb (70ns)	£22.50
72pin 8mb (70ns)	£37.50
72pin 8mb (60ns)	£42.50
72pin 16mb (70ns)	£79.99
72pin 16mb (60ns)	£84.99

Our memory SIMM prices are reviewed on a weekly basis - call for latest pricing

OUR ADVICE! BUY NOW TO AVOID CHRISTMAS PRICE SURGES!

SCANNERS

PowerScan b/w	£74.99
PowerScan Colour	£159.99

Highly acclaimed parallel-port fitting scanners for the A600/1200, high magazine reviews

Epson GT5000 SCSI	£399.99
Epson GT5000 Parallel	£399.99

FAX MODEMS

9600 Modems	£49.99
14400 Modems	£59.99
33600 Modems	£119.99

Our modem packs cannot be beaten! All units include free access to our BBS, Midnight Express, where you can download 1000's of PD and Shareware programs for your Amiga - Free of charge, 24hrs a day, 7 days a week.

Information on accessing the Internet with your Amiga is also included....FREE!

TEL: 01384 77172

MONDAY - FRIDAY 10am - 5pm SATURDAY 10am - 1pm Switch, Delta, Visa, Access, Mastercard, Diners, American Express

Personal callers please call first to check availability

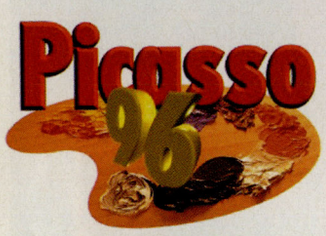
BBS:
01384 86-56-26
(5 LINES RINGDOWN)

See us on the World Wide Web at:
www.woden.com/~mtx

INFORMATION AND ORDERING. We accept all major credit and debit cards, and you can telephone your order through to us during business hours on: (44) 01384 77172. This line can be very busy, so please be patient. Cheques and postal orders may be sent to us direct at: Megatronix, 21 Tiled House Lane, Dudley, West Midlands, DY5 4LG. Personal callers please call first to check availability.

PAINTING UP A STORM

Millions of colours and resolutions up to 1600 by 1200; Stephen Mangram test drives Picasso IV, the latest and greatest Zorro graphic board from VillageTronic.



There are lots of display cards for big box Amigas. The latest models are Picasso IV, from VillageTronic, and CyberVision 3D, from phase 5. Both were announced long before they became available, but at last they are on sale. phase 5 discontinued their earlier CyberVision 64 board last summer, while VillageTronic still sell their earlier Picasso board in a revamped 'Picasso 2+' version.

The new Picasso IV deserves comparison with Cybervision and Picasso 2. It also worth evaluating the Picasso 96 system, the latest software package to offer retargetable displays for Amiga graphics cards - and not just the Picasso IV.

Hardware

Picasso IV is based on the Cirrus Logic GD5446 graphics chip. This was developed for PC SuperVGA cards and supports an 18-bit colour palette (262,144 colours) in 256-colour 'chunky' byte-per-pixel mode, and 16 million colours in full 24-bit 'true colour' modes, at the expense of three times as much memory.

The board contains 4Mb of fast video RAM - enough for 24-bit colour in all but the very highest resolutions, which are limited to 16-bit 'High colour' modes.

Picasso IV is compatible with Zorro 2 and Zorro 3, although it does not take advantage of the potentially faster Zorro 3 transfer rate. The main advantage of using it on a Zorro 3 machine, like an A3000 or A4000, is that the video memory can be relocated out of the original 16Mb Amiga memory space.

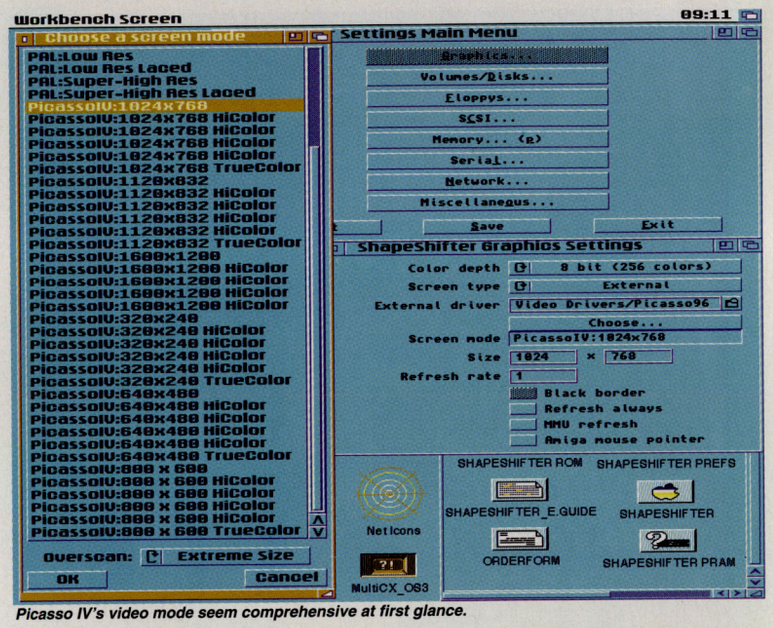
On a Zorro 2 machine the video RAM competes for the same space as Zorro 2 memory expansion, and since there is only a total of 8Mb available for both, you have to trade off your 16-bit fast RAM against space needed for Picasso.

Plugging in

Picasso IV is designed to plug into the combined video and Zorro 3 slot of an Amiga A3000 or A4000, but this does not mean that 16-bit Amiga owners have been forgotten. The video slot on the A1500 and A2000 is far away, the other side of the power supply, so VillageTronic supply three cables to feed signals from that slot to the card, giving it access to standard Amiga graphics and sound.

First you must chop away two bridges which normally fix the video slot connector to the same circuit board as the Zorro one. You can then flex the connector (outlined in red below) till it becomes detached, fit the cables and plug the floating connector into the required hole.

This sounds tricky, but in practice it is a neat solution and the documentation is adequate. The advantage is that there is no need for a connection to the 23-pin Amiga video socket, or the phono audio outlets. Picasso IV reads the signals from the video slot and merges them electronically with its own outputs.



Picasso IV's video mode seem comprehensive at first glance.

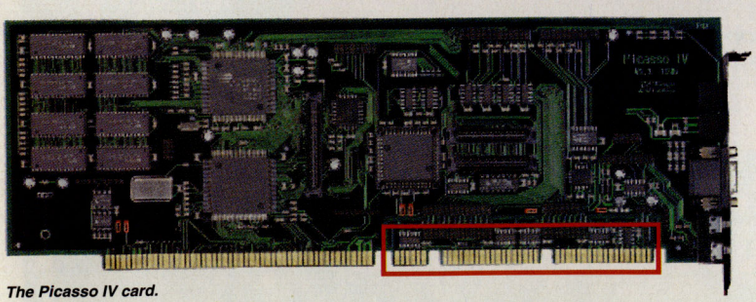
This wish list is reminiscent of rival phase 5's proposed Amiga extensions, and so far just as insubstantial.

VillageTronic have grand plans for the Picasso IV, covering it with connectors for add-ons as yet unavailable. They have made provision for stereo sound and composite video inputs and outputs, adapters for MIDI and MPEG, a TV tuner, and even a PowerPC plug-in - a bizarre extra for a graphics board!

This wish list is reminiscent of rival phase 5's proposed Amiga extensions, and so far just as insubstantial. For now you should discount these claims, and regard Picasso IV as a video board with grand ambitions. So far these add-ons are no more than vapourware.

The graphics output is an SVGA standard 15-pin connector and it plugged straight into my Commodore 1960 monitor. This is hardly the ideal monitor for Picasso, as it cannot keep up with the highest scan rates, but it manages up to 50kHz without strain. That is enough for resolutions up to a million pixels per screen without interlace, and almost two million - 1600x1200 pixels - interlaced.

You will need a good - and that means large - monitor to take advantage of this sort of mode. Magic User Interface becomes very useful because it lets you tailor window and character sizes for clarity and readability on a big screen. The pointer gets very small and hard to find at



The Picasso IV card.

high resolutions, but you can double its size by setting a monitor tooltype.

The display resolutions are generous, with up to two million pixels per screen in thousands of colours if you can stand interlace - and full 24-bit colour in up to 1280x1024 pixel resolution. The top resolution without interlace is 1120x832 pixels in 256 colours - a bit flickery at 47Hz on my US-made monitor - or 1024x768 in 24-bit 'true colour' at a quite acceptable 59Hz.

Configuration

It was easy to adjust the Picasso display modes to use the full screen area - a problem with AGA modes, even using the excellent MONED. Picasso comes with a very similar configuration program that lets you tweak the display timing to make best use of your screen. As with MONED, the picture collapses and disappears if you push the parameters too far, but it is easy enough to restore it by tapping the opposite key a few times.

You only need to perform this configuration once for each mode you're likely to use. It cannot be pre- configured or automated as it depends on the scan rates and overscan capabilities of your monitor, so tweaks are essential to get a good match.

Unlike CyberVision 3D from phase 5, every Picasso IV board has a built-in monitor switcher, so programs - mostly games - which only work with Amiga bitplane graphics still work, without the need to move the monitor connection from the graphics board back to the motherboard video output.

Picasso IV gets the Amiga graphics signals from the Zorro video slot, so there is no longer any connection to the Amiga's video output. Better still, the Amiga display is automatically scan-doubled to 31kHz so you can see it on a cheap PC monitor which would not normally be compatible with TV display modes. What is more, interlaced PAL and NTSC displays are flicker-fixed automatically!

The downside is that the monitor switcher is only compatible with the original OCS Amiga display modes, NTSC and PAL. If any of your programs are configured to use Productivity, Multisync, Super72 or any of the DBL or Euro modes, they will give a single flickering line at the top of the Picasso screen, and you will need to move your cable back to the real Amiga video output to see the proper display.

In practice this is not much of a limitation, as most programs that require a display at greater than TV resolution can be redirected to use a Picasso mode, and this will generally benefit in speed into the bargain. However, if you rely on AGA modes at present, you are advised to check that your programs will work with Picasso 96 before you shell out hundreds of pounds on a graphics board.

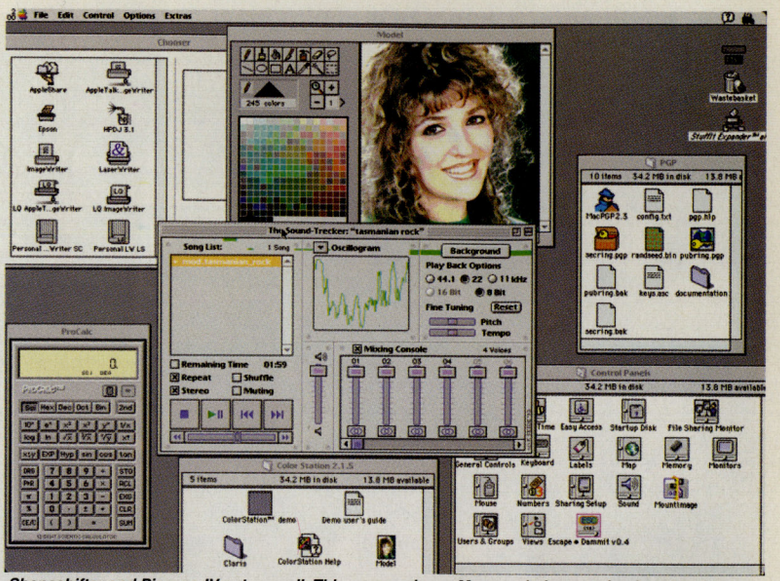
Final Copy and Final Writer are not yet compatible, crashing Picasso 96 when they attempt to open a new window.

Software

Workbench emulation is good, but Intuition menus mess up the background leaving a blemish after they should have disappeared if used on HiColour or TrueColour screens. The solution is to periodically re-draw the screen, or restrict your Workbench to 256 colours, which is rarely a limitation in practice.

Most of my programs worked fine with Picasso IV installed, treating its new video modes just as any normal Amiga modes. Directory Opus, Devpac and HiSoft BASIC all moved to the new screens without demur.

There is no annoying requester when screens are opened - PAL and NTSC screens appear as normal, but without the interlace flicker, and modern programs that use a screen mode requester add the Picasso modes to their list.



Shapeshifter and Picasso IV get on well. This screen shows Mac emulation running in 256 colours

Snags

DPaint IV AGA starts up okay, but gets knotted soon after, leading to a system crash. My old copy of XiPaint, from a coverdisk, gave a scrambled screen even with the Picasso 96 driver, but later versions are said to be compatible. Vista and Deluxe Photolab worked fine, on PAL screens.

The Doom-clone Nemac IV did not render to the Picasso screen, although it listed the new modes and allowed them to be selected. ProPage works as well as ever, but PageStream 2.22 switched to PAL mode, then gave a guru report.

Final Copy and Final Writer are not yet compatible, crashing Picasso 96 when they attempt to open a new window. This is a pity as they could benefit from the extra resolution and speed in 256 colour modes.

Workbench hacks give mixed results, as you might expect. Many are hard-wired for a standard Amiga display. WBVerlauf uses a custom Copper list to prettify the Workbench, so it has no effect on Picasso. ARoach leaves partly-drawn windows on screen, making it unusable, but Ameko - the desktop cat - runs fine in Picasso modes.

Screen-savers like StarBlank and the standard Commodore blanker ran well, switching automatically to a PAL display. I tried a couple of 'lens' utilities but these were unable to find or magnify images on Picasso screens, which is a pity as they would be particularly useful in the new top-resolution modes.

Bonuses

Similarly, the Quickgrab screen grabber returns a pattern from chip memory, which is not much use if the screen is actually in Picasso RAM. Luckily there is a new screen grabber on Aminet, CyberGrab, which works efficiently with both Picasso and Amiga screens.

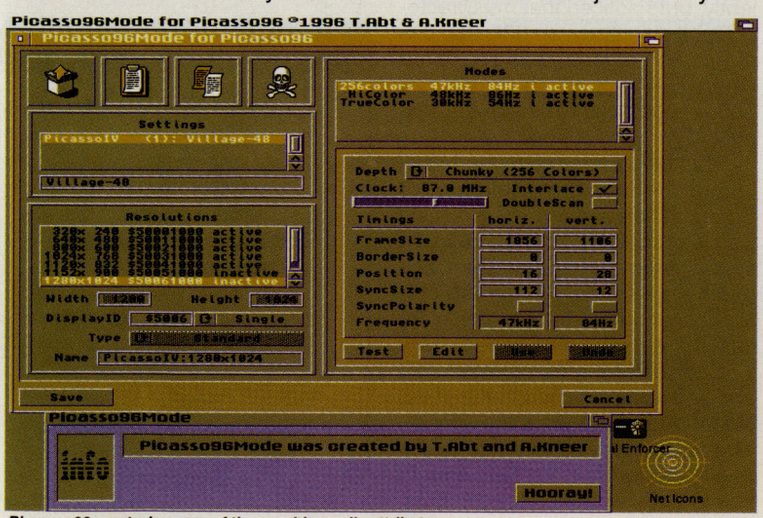
Even though Picasso IV is a new board, a surprising number of utilities in Aminet's GFX/BOARDS and GFX/SHOW directories work already. This is because of the built-in compatibility between Picasso96 and its rival CyberGraphix.

CyberShow, CyberView, CyberWindow and ShowGIF are excellent screen and slideshow display programs which take full advantage of Picasso's extra colours and resolution. FLIcasso and CyberAVI work well with animations from other computers, which match the Picasso display organisation better than Amiga bitplanes.

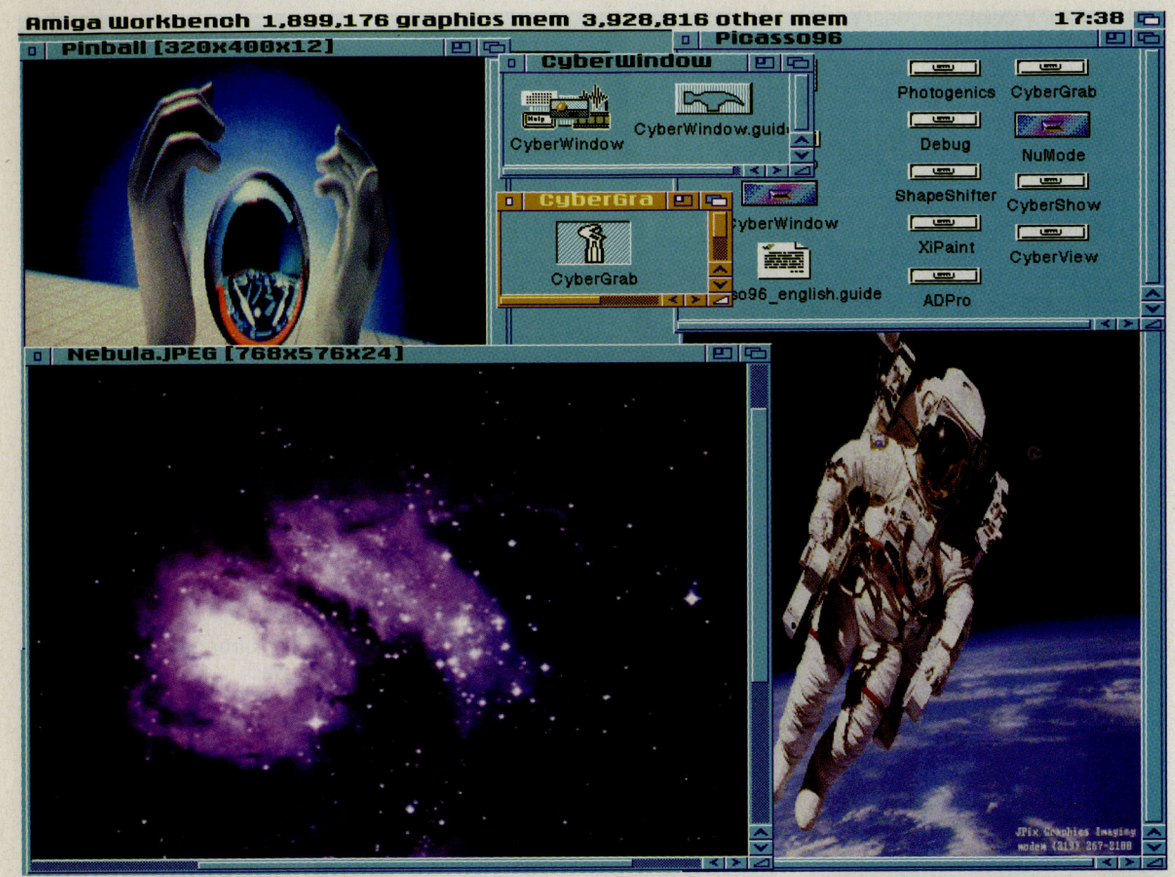
Picasso96

The Picasso96 system is a clone of phase 5's CyberGraphix. The Amiga hardly needs yet another retargetable graphics 'standard', but VillageTronic have been forced to write their own because phase 5 have refused to support the new Picasso board, presumably for reasons of commercial rivalry.

As with CyberGraphix, Picasso96 allows programs that manipulate the display with standard system calls to open on graphics board screens, rather than normal Amiga ones. The



Picasso 96 controls some of the graphic card's attributes.



Picasso IV can fulfil the desire for a 24-bit Workbench screen.

main exceptions are games and emulators, which bypass the operating system and 'hit the metal' for speed.

Picasso96 is only compatible with Workbench 3.1 - Commodore's final version - and requires a 68020 or better processor. The second requirement is reasonable - 68000s are too slow for really high resolution displays - but the need for Workbench 3.1 is bad news for A4000 owners, who will see little other benefit in upgrading from 3.0 to 3.1, and pay a substantial price.

If you have an A2000 or A3000 the upgrade from Workbench 2 to Workbench 3.1 is worthwhile. VillageTronic seem to aim their products mainly at the many users of older Amigas, who lack the 'stop-gap' features of AGA and really need a graphics card to keep up with modern displays.

Picasso96 is supplied as standard with the Picasso IV, but the software can also be used with the old Picasso 2 and new 2+, Domino, CyberVision, Merlin, Omnibus and Spectrum boards. The powerful but peculiar Retina BLT Z3 is not yet supported and you should not hold your breath waiting for CyberVision 3D support, given phase 5's obstructive attitude.

If you are already using CyberGraphix, or the old Picasso software, you will have to remove all the files before installing Picasso96. There is no way to use more than one graphic card support package at a time, although you can use several cards compatible with Picasso 96 at once, if you must. I admit I have not tried this.

PICASSO IV DISPLAY RESOLUTIONS

WIDTHxHEIGHT	VSYNC (Hz)	HSYNC (kHz)	NOTE
320x240	50-60	30-31	
640x480	71	37	
800x600	58-64	37-41	
1024x768	58-59	47-48	
1120x832	37-47	37-46	[1]
1152x980	56-72	29-38	[2]
1280x1024	54-84	30-48	[2]
1600x1280	60	38	[3]

NOTES:
[1] Interlaced in 16-bit, 37Hz in 24-bit (ugh!) [2] All interlaced, slow syncs for 24-bit only [3] Interlaced, maximum of 65,536 colours

The Picasso96 facilities are not documented in the Picasso IV manual - a disappointing ten page overview of the hardware - but the supplied disk includes Amigaguide documentation and a collection of utilities and drivers. FLIP96 plays FLI animations - popular on PCs - on a Picasso screen, while CheckBoards is a debugging utility that displays details of the board you have fitted.

Shapeshifter

Special Picasso96 drivers are supplied for Photogenics, XiPaint, ADPro and Shapeshifter. The Shapeshifter driver worked excellently, but I noticed that my Directory Opus display, on an 800x600 pixel Picasso screen, was corrupted when I switched to it from a 1600x1200 pixel Shapeshifter display.

This only happened when I selected the highest resolution for Shapeshifter, and the Opus display was later restored without ill effects, so it is hardly a serious problem, and much less annoying than the corruption of other screens when Picasso 2 is used with Shapeshifter.

Such effects are only cosmetic, and you soon get used to the occasional need to re-draw the screen. The fast redraw makes the hassle negligible, and colour Mac emulation is a joy with Picasso IV, much faster and more compatible than any of the Amiga custom chip colour drivers.

Conclusion

Picasso IV works well, and is warmly recommended, particularly for A2000 and A3000 owners. The digital monitor switcher is good, because it has a built-in scan doubler, but less versatile than Picasso 2 because it cannot pass through Multiscan modes.

Software compatibility is better than expected, but less than perfect; it is still early days for Picasso96, and free updates are promised, which should iron out some of the commercial program incompatibilities.

Operations that use the Picasso IV hardware are very fast, thanks to the 50ns EDO memory on the card and the built-in blitter which can draw lines and copy chunks of memory around. The transfer rate from Amiga RAM to Zorro is less impressive than on a true Zorro 3 card, but adequate in practice.

The requirement for Workbench 3.1 means extra expense for most users, but it is worth it if you are on Workbench 2 at the moment.

The extra sockets represent considerable potential, but VillageTronic have not indicated when any of the proposed add-ons will become available, and in the meantime you should not use them as the justification for buying this board. It remains to be seen if the add-ons will appear, and cost and compatibility is unknown. Sadly, VillageTronic seem to have taken a leaf of out phase 5's book in this regard.

On graphics performance alone, Picasso IV takes the lead among Amiga display cards, and it is reasonably priced at £300 in view of the in-built 15kHz monitor switcher and flicker fixer. With a bit more work on software compatibility, it could be untouchable. ***AUI***

INFO

Rating: 85%

PRICE
£299.95

CONTACT
Manufacturer:
VillageTronic Marketing GmbH
Wellweg 95, D-31157
Sarstedt, Germany.
http://ftp.tu-dresden.de/~deck/pic96/index.html

UK Importer:
Blittersoft
6 Drakes Mews, Crownhill Industry
Milton Keynes, MK8 0ER.
Tel. 01908 261466

Northampton Store:
01604 722499/710927
Fax: 01604 722498
E'Mail Direct.-
Softare.UK@MSN.COM

DIRECT SOFTWARE UK LTD

Hardware & Technical Support
01623 455398

WITH OVER 400 SOFTWARE TITLES

DIRECT SOFTWARE UK LTD ARE NO.1 IN THE AMIGA MARKET

THIS MONTH'S SPECIALS

Blitz Basic 2.1	£14.99	Turbo Trax	£14.99
Breathless	£22.49	PGA Euro Tour Golf	£12.99
Chaos Engine 2	£19.49	Watchtower	£15.99
Duneon Master 2	£17.99	XP8	£18.99

THIS MONTH SPECIAL

TV TEST PRO 2.0 RRP ~~£79.99~~ ONLY £29.99

Alien Breed/Quack	£18.98
Base Jumpers	£14.99
Beavers	£14.99
Brutel Football	£9.99
Bubba N Stix	£9.99
Bubble & Squeak	£9.99
Bump & Burn	£18.99
Cannon Fodder	£16.99
Castles 2	£16.99
Chaos Engine	£18.99
Chuck Rock 2	£17.99
Clockwiser	£6.99
Dangerous Streets	£12.99
Deep Core	£13.49
Diggers (Oscar)	£4.99
Disposable Hero	£19.99
Donk	£14.49
Fields of Glory	£14.99
Fresh Fish Volume	£14.49
Gloom	£9.99
Grandslam Collection	£24.99
Guardian	£9.99
Guiness Book of Records	£22.99
Gulp	£7.99
Gunship 2000	£19.99
Heimdall 2	£14.99
James Pond 2	£14.99
James Pond 3	£9.99
Jet Strike	£14.99
Last Ninja 3	£9.99
Legents	£14.99
Marvellous Marvin Adv	£12.99
Morph	£17.49
Naughty Ones	£7.99
Network CD 2 (with cable)	£28.49
PGA Euro Tour	£16.99
Pinball Illusions	£14.99
Pinball Prelude	£21.99
Power Drive	£18.99
Rise of Robots	£19.99
Roadkill	£9.99
Sensible Soccer	£12.99
Skeleton Krew	£12.99
Sound Library	£14.99
Spiers Legecy	£19.99
Sports Football	£17.95
Star Crusader	£16.99
Strip Pot	£9.99
Summer Olympics	£18.99
Super League Manager	£9.99
Super Methane Bros	£9.99
Super Skid Marks	£7.99
Total Carnage	£19.99
Total Carnage	£12.99
Trolls	£7.99
UPniverse	£24.49
Zool	£14.99
1st Division Manager	£3.00
Action Fighter	£8.99b
Action Service	£3.00b
Advanced Dungeons & Dragons	£12.99
Air Force Commander	£14.99
Alien Breed 2 (1200)	£14.49
Alien Breed 3D	£14.99
Alien Breed Tower Assault	£14.99
Allo Allo	£12.99
Altered Beast	£5.99
Approach Trainer	£14.99
Ashes of Empire	£14.99
Assasin (Sec)	£9.99
B17	£14.99
Bandit Kings of Ancient China	£14.99
Banshee	£14.99
Base Jumpers	£14.99
Batman Returns	£16.49
Battle for the Ashes	£6.99
Bionic Commando	£6.99
Birds of Prey	£15.99
Bliinkys Scary School	£4.99
Blitz Basic	£19.99
Blobz	£14.99
Body Blows (Prev un-released)	£14.99
Bograts	£12.99
Breathless	£29.99
Brian Lara 96	£19.99
Brutal Sports Football	£14.99
Bubble & Squeak	£9.99
Bullys Darts	£7.99
Burnout	£19.99
Cannon Fodder	£14.99
Capital Punishment	£24.99
Champ Manager 94 Data	£9.99
Championship Run	£3.00
Chaos Engine	£14.99
Clockwiser	£9.99
Colonization	£14.99
Colossus Chess X	£4.99
Cool World	£19.99
Corkers Compilation	£19.99
Covert Action	£19.99
Cricket Masters	£18.99
Curse of Enchantia	£24.99
Cytron	£14.99
Dalek Attack	£12.99
Dangerous Streets	£12.99
Dawn Patrol	£16.49
D-Day	£21.99
Deathmask	£14.99
Demon Blue	£3.00
Desert Strike	£9.99
Dogfighter	£14.99
Double Bill (Call for details)	£16.99
Dragon Force	£12.99
Draw Studio	£59.95
Dune	£14.99
Dune 2	£12.99
Elite	£9.99
Emlyn Hughes Int Soccer	£3.00
Empire	£11.99
English	£14.99
Epic	£18.99
Essential Maths	£14.99
Euro League Manager	£19.99
Excellent Games	£22.99
Exile	£14.99
Exterminator	£5.99
Eye of the Beholder 2	£19.99
F1 Grand Prix Circuits	£4.99
F117A	£14.99
F16 Flacon	£3.00b
F19	£14.99
Fear	£9.99
Fields of Glory	£14.99
Finest Mission	£9.99
Flashback	£22.49
Football Director 2	£7.99
Football Glory	£8.99
Formula 1 Masters	£18.99
Frontier Elite 2	£18.99
G Goach Test Match	£9.99
G Goach World Class Cricket	£9.99
Game Pack 2	£18.99
Genesia	£16.99
Geography	£14.99
Germany 8/10 Years	£14.49
Gloom	£9.99
Gloom Deluxe	£14.99
Goal	£9.99
Guardian	£7.99
Gulp	£12.99
Gunboat	£14.99
Harlequin	£15.99
Heimdall 2	£16.99
Hemdall	£6.99
Heroquest	£12.99
Heroquest Return of the Witch	£12.99
Hill St Blues	£6.99
Hillsea Lido	£12.99
Hired Guns	£19.99
Hitchicker Guide to the Galaxy	£3.00b
Huckleberry Hound	£7.99
Humans 3	£29.99
Hunter	£14.99
Hyperaction	£14.99
Impossible Mission	£9.99
Indiana Jones Fate of Atlantis	£12.99
Indianapoliss 500*	£9.99
Inter Talk	£12.99
Interbase	£9.99
International Golf	£14.99
Interoffice	£19.99
Interspread	£9.99
Interword	£12.99
Intos	£14.99
Ist Division Manager	£3.00b
Italy 90	£3.00b
James Pond	£9.99
Jet Strike	£14.99
Jetpiiolot	£19.99
Jimmy White's Snooker	£22.99
John Madden American F.Ball	£10.99
Junior Essentials	£14.99
Jurasic Park	£18.99
Kick Off 2	£3.00b
Kick Off 3	£12.99
Kids Rule OK	£14.99
Kids Rule OK 2	£14.99
Kings Bounty	£12.99
Lara 96	£19.99
Legacy of Scrisal	£22.99
Legends	£14.99
Liberation	£15.99
Lotus Trilogy	£24.49
Lure of the Temptress	£22.99
Magic Pockets	£8.99
Man Utd Europe	£3.99
Man Utd Prem League Champ	£9.99
Marvins Marvellous Adv	£12.99
Maths Aloebra	£14.99
Maths Geometry	£14.99
Maths Numbers	£14.99
Maths Statistics	£14.99
Mean Arenas	£11.99
Medevil Warriors	£8.99
Mega Traveller 1	£19.99
Microprose Grand Prix	£14.99
Minskies the Abduction	£19.99
Movie Premier	£18.99
Myth	£17.99
Nascar Challenge	£19.99
Naughty Ones	£14.99
New York Warriers	£12.99
Nick Faldo's Golf	£10.99
Ninja Warriors	£4.99
Operation Cobra	£11.99
Operation Thunderbolt	£5.99
Opus 5	£44.99
Over the Net	£12.99
Overkill	£14.49
Overlord	£14.99
Pacific Island	£12.99
PGA Euro Tour Golf	£12.99
Pinball Fantasies	£9.99
Pinball Mania	£14.49
Pinball Prelude	£19.99
Pinball Prelude	£18.99
Populous 2	£14.99
Postman Pat 3	£7.99
Powermonger	£7.99
Primal Rage	£24.49
Pro Tennis Tour	£14.99
Project X	£9.99
Puggsy	£12.99
Quadralien	£5.99
Reunion	£22.48
Rise of the Robots	£14.99
Road Rash	£9.99
Roadkill	£12.99
Robocop 3	£19.99
Rockstar Ate my Hamster	£3.00b
Rugby League Coach	£9.99
Sci-Fi Collection	£11.99
Sen World of Soccer 97	£19.99
Sensible Soccer 92/93 Europe	£12.99
Sensible Soccer 97 (Data Disks)	£9.49
Sensible W O Soccer 97 Data Disks	£17.99
Shadow Fighter	£19.99
Shadow of the Beast 3	£18.99
Shadow Worlds	£22.99
Shadowlands	£14.99
Shaq Fu	£15.99
Silk Worm	£5.99
Sim Ant	£19.99
Sim City/Populous	£19.99
Skidmarks	£7.99
Snapperazzi	£9.99
Soccer Superstars	£9.99
Soccer Team Manager	£11.98
Space Ace	£3.00b
Space Hulk	£14.99
Space Quest 1	£14.99
Special Forces	£9.99
Spelling+ Punctuation	£14.99
Spiers Legecy	£19.99
Stardust	£14.99
Starlord	£14.99
Storm Master	£9.99
Street Fighter 2	£9.99
Structured Spelling	£14.99
Super Cars 2	£6.99
Super League Manager	£9.99
Super Skid Marks	£12.99
Super Skid Marks Data Disks	£7.99
Super Street Fighter 2 Turbo	£19.99
Super Tennis Champs	£16.99
Super Tennis Champs Data	£7.99
Suburban Commando	£11.99
Syndicate	£14.99
Tactical Manager 2	£14.99
Tennis Cup 2	£5.99
Terminator 2	£18.49
Terropods	£3.00b
The Blue The Gray	£18.99
The Immortal	£12.99
The Patrician	£18.99
The Perfect General	£14.99
Theme Park	£14.99
Theme Park (Aga)	£14.99
Thomas & Friends	£8.99
Timekeepers	£11.99
Timekeepers Expension	£9.99
Times of Lore	£8.50
Tommy Gun	£14.99
Top Shots	£3.00b
Tornado	£12.99
Total Carnage	£12.99
Touring Car Challenge	£14.99
Triple Action 2	£11.99
Tristar	£9.99
Trolls	£9.99
Turbo Trax	£14.99
UFO	£16.99
Ultimate Soccer Manager Data Disk	£9.99
Valhalla 1	£14.99
Valhalla 2	£14.99
Valhalla 3	£19.99
Virtual Karting	£19.99
Walker	£19.99
War in the Gulf	£12.99
Watchtower	£19.99
Wembley Inter Soccer	£14.99
Wing Commander	£14.99
Wings of Death	£7.49
Wizball	£3.00b
Wolfpack	£9.99
World Class Rugby	£3.00b
World Golf	£14.99
World of Soccer	£9.99
World Rugby League	£9.99
Worms	£18.99
Xenon 2	£7.99
XP5	£19.99
XP6	£19.99
Xtreme Racing	£17.99
Zool	£14.99

166 Birchfield Road East, Northampton NN3 2HF

SUPREME STUDIO

Three for one and none for free: the Dean brothers go commercial. David Ward tries out a CD-ROM with a lot to offer.

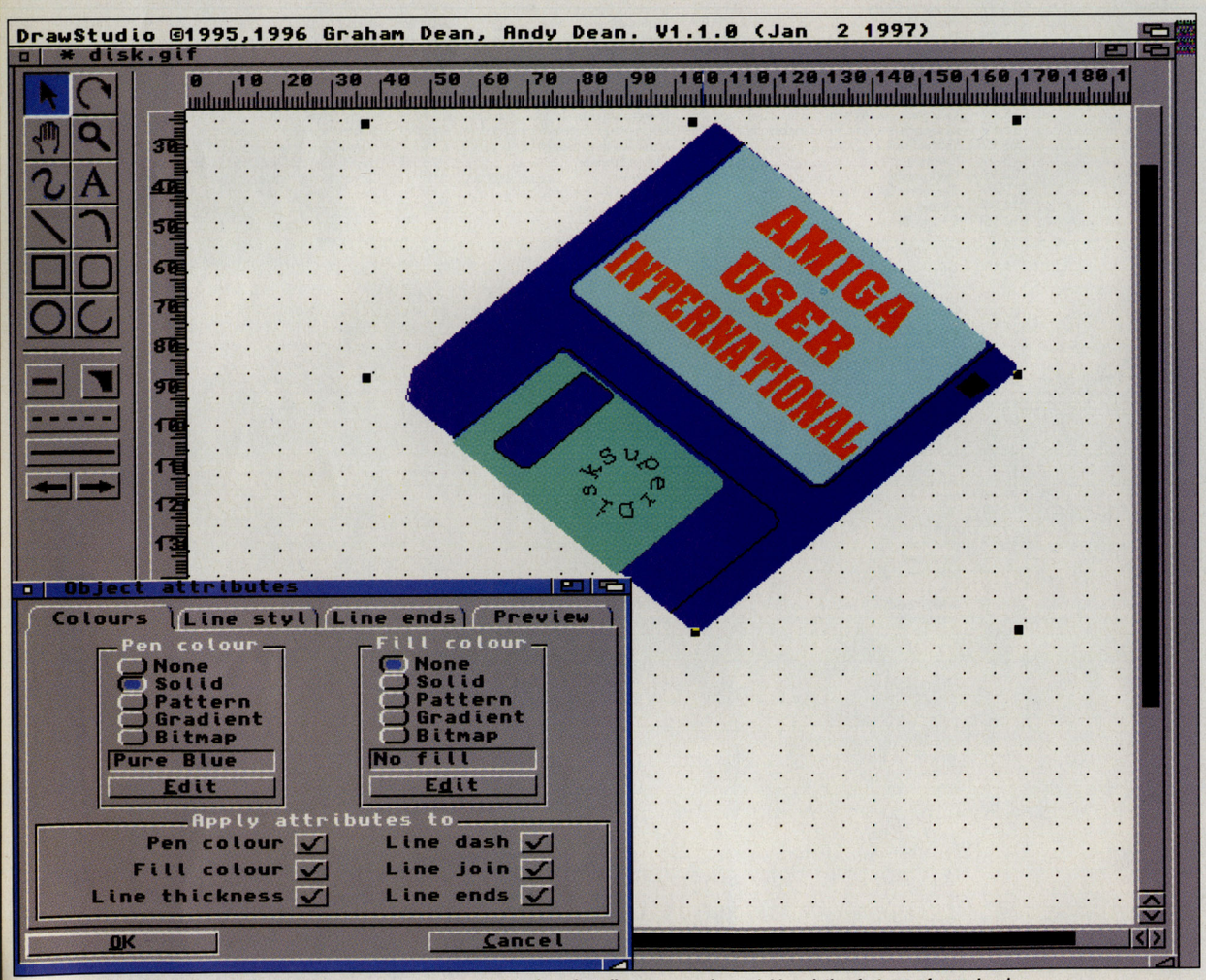
Several years ago I was attending a World of Amiga Show and was introduced to the Dean brothers, Graham and Andy. They had just released ImageStudio as a shareware processing and effects package to an astonished Amiga community. A program that could hold its head up with the likes of Art Department Professional and ImageFX, yet was only £10 when registered. The chap who introduced me to the brothers said they would go far, he wasn't wrong.

Here we are three years later and the brothers, in conjunction with LH Publishing, have just released their first Amiga CD-ROM - DrawStudio, a structured drawing package. "What is a structured drawing?", you may ask. It is a program that allows you to build complex images from simple shapes. Each shape is an object on your 'paper' which you can stretch, resize, rotate, flip, pull around, and so on. The supplied shapes are the typical rectangle, circle, curve, straight line, and wiggly line as you would find in any paint package, but structured drawing is based on an entirely different concept.

DrawStudio is a novel development on the structured drawing front.

In a paint program, such as Personal Paint, for instance, you can lay down on your 'paper' a variety of shapes and patterns in many different colours. However, if you wanted later to move one of the coloured shapes you had laid down at the beginning of your drawing, you couldn't. It's just like painting in real life. Once the paint is on the canvas you cannot move it. You can only paint over it.

Structured drawing, on the other hand, relies on the power of the computer to 'remember' what was drawn



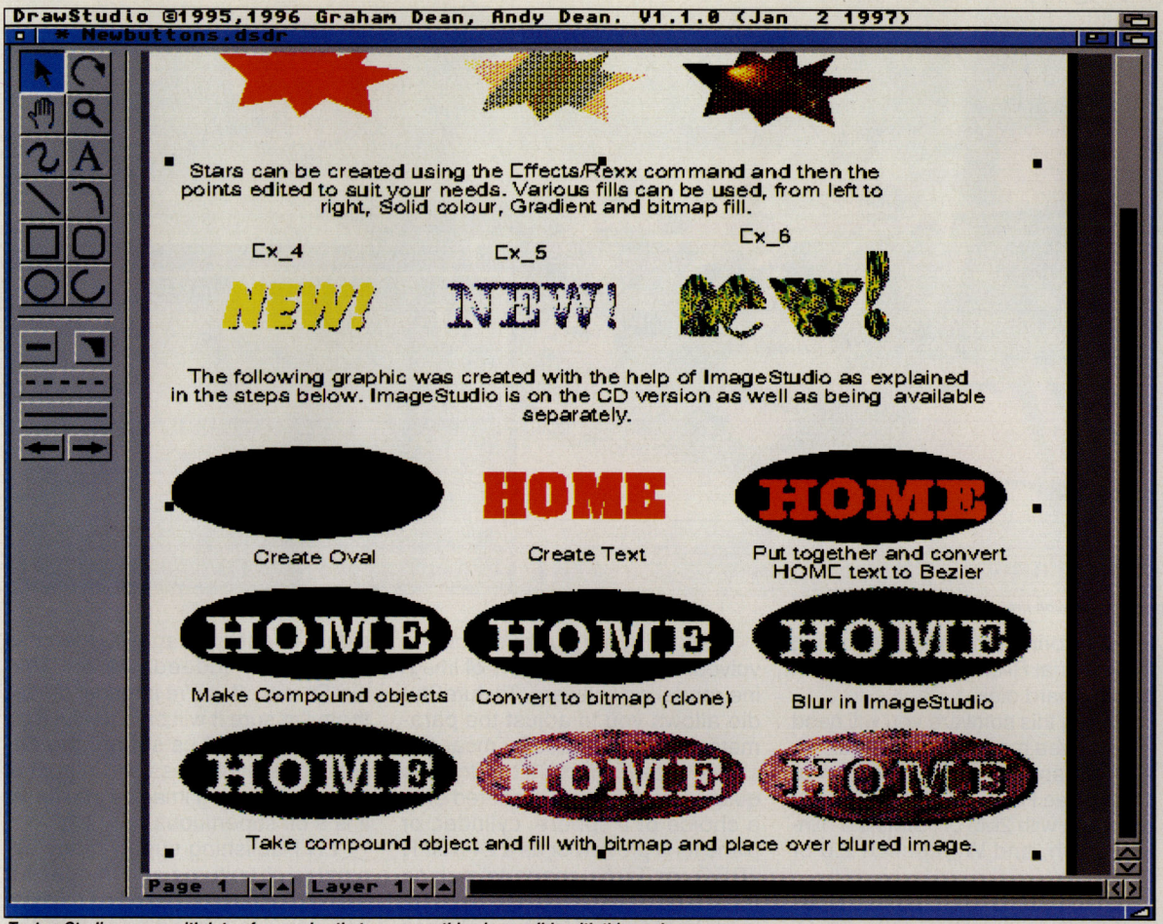
By using MUI, TextureStudio is given a very user friendly interface that allows you to alter quickly existing features of your drawing.

Diskspace etc.

Before you all get overexcited at the possibilities of this program, I should tell you that DrawStudio requires your Amiga to be running Workbench 2.0 and a 68020 processor or better. It doesn't necessarily need to be an AGA machine, but that helps. You will also need a hard drive and at least 3Mb of RAM. A Floating Point Unit (FPU) maths chip also speeds up the program's operations, so DrawStudio is supplied in two forms, with one version to take advantage of such a chip. MUI is required too, and this is supplied on the CD-ROM.

MUI, or Magic User Interface, is not the Chip RAM hogging demon it is often accused of being. No, that's Magic Workbench - an entirely different program. MUI is a collection of files designed to make the Amiga programmers' lives that little easier by supplying a set of ready-built bits for them to use in their own interfaces. This means they can get on with the job of writing good software and not have to worry about the finer points of GUI design.

However, MUI still requires nearly 4Mb of hard disk space for all its files.



TextureStudio comes with lots of examples that prove anything is possible with this package.

where. Each shape is surrounded by an invisible box that defines it as an object. When clicked on, the box appears and shows you the limits of the object. Around the edges of the box are 'points' which can be moved by clicking on them with the mouse pointer. Move one of the corner points and the whole object can be resized proportionally larger or smaller. Choose a point on the top or bottom and you can stretch the object vertically. If you choose a point at the side you can stretch or shrink the object horizontally. All this can be done without the 'jaggies' that you get in most paint packages when you resize a brush.

Many Amiga users will already be familiar with competing products: ProDraw, ExpertDraw, and ProVector for example, but DrawStudio is different. It allows you to save (export) your drawing as an anti-aliased bitmap of any reasonable size in a variety of formats. This could be one of the many IFF types, GIF, JPEG, BMP, and even TIFF, for loading into another paint package. It will import Amiga standard DR2D structured drawing files too.

Another of its advantages over traditional structured drawing programs is in its support of fills. These can be in a wide choice of colours as you would expect, but there are also gradients, tiling, and translucency as well as the ability to load in a bitmapped image as your fill. All in 24-bit colour too. That's the clever thing about DrawStudio, you can be working in single bit black and white, 8-bit greyscale, or 8-bit colour (256 colours) yet the software works internally with a palette of up to a possible 16 million plus colours.

I think you'll agree with me that DrawStudio is one of the most potent illustration packages available for the Amiga today.

The maximum number of colours DrawStudio can currently run in is 256, but if you have a Cybergraphics card then you will be pleased to hear that the Dean brothers are working with Phase 5 on making the two products compatible so you can work in glorious 24-bit.

The example I created for *AUI* took about half an hour from scratch using my existing knowledge of how structured drawing programs work. If you are a newcomer to this type of package then the hundred-odd page manual should take care of your needs in learning how to work it and there is bubble help too if you leave the mouse pointer over a tool button for a few seconds. Once you have your head around the concept of 'objects', and if you've already done some DTP work you're halfway there, then you'll soon start creating good graphics.

Excellent graphics come later, how much later depends on your artistic skill. Larry Hickmott of LH Publishing has provided a number of brilliant examples of what DrawStudio is capable of on the CD. These are not just fancy IFFs you can only look at. LH Publishing have thoughtfully included the original DrawStudio files used to create these bitmaps. Therefore you can see they're not trying to pull the wool over your eyes and you get the chance to experiment with them yourself.

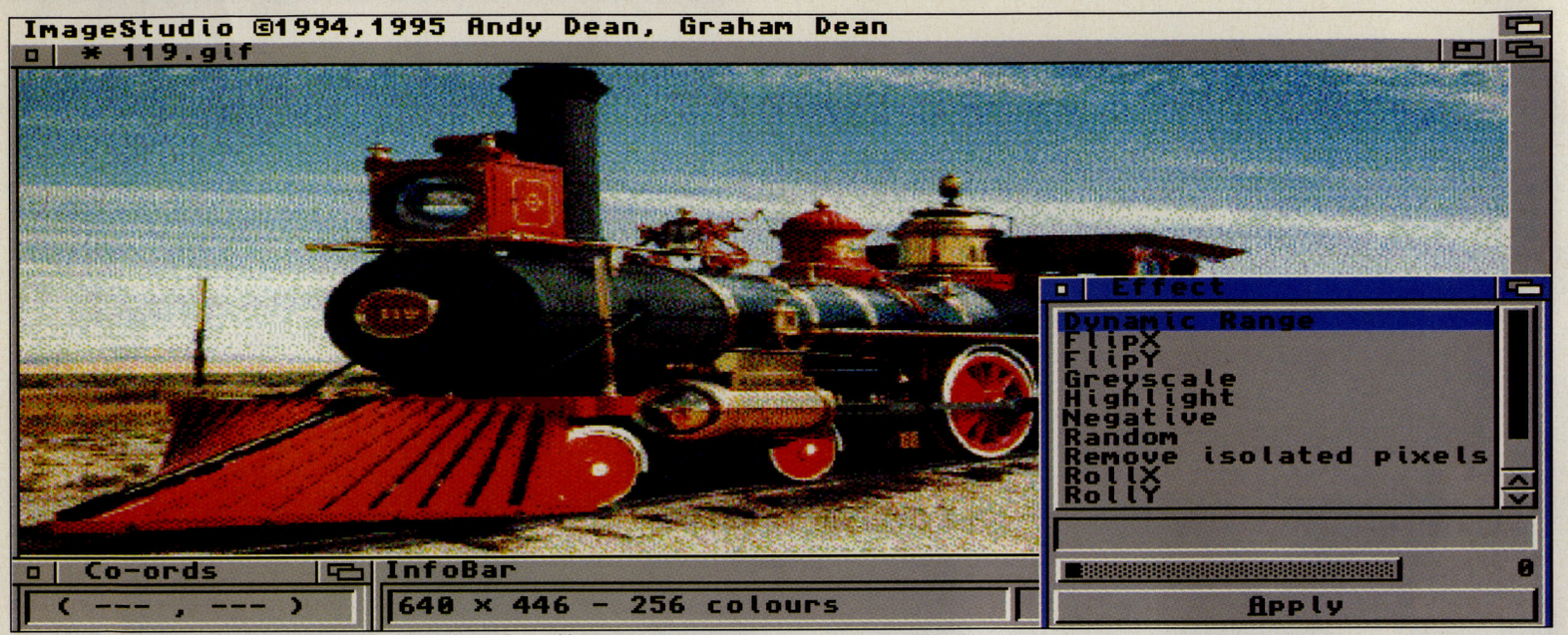
Once you've mastered the basic drawing tools and learned how to manipulate Bezier curves, thank heaven for multiple Undos, then you can progress to the more advanced features DrawStudio offers. There is an ARexx interface for example, and you can write you own scripts to make some functions semi-automatic. There's also Warping, which can be applied to text - DrawStudio has a built-in Adobe Type 1 text engine so you can use the hundreds of fonts available - and shapes.

Cut, copy, and paste are essential and are to be found among the tools available from the pull-down menu bar along with flip, both horizontally and vertically, and rotate to any angle. Supporting tools for the artist include grids, rulers (with a choice of measurement scales), and snapping. This latter feature can be used to snap to grid, line, curve, object, or object ends. It is a very powerful function indeed.

I think you'll agree with me that DrawStudio is one of the most potent illustration packages available for the Amiga today. You don't have to take my word for it, for LH Publishing have received glowing testimonials from satisfied customers using the initial version of the program and, at the recent birthday celebrations of the Queen Mary and Westfield College Amiga Society, many members were extolling the virtues of the software. Since these guys are used to operating expensive computer workstations with equally expensive software, it must be a great



TextureStudio can create 24-bit bitmap graphics from apparent 8-bit structured drawings.



ImageStudio steams through your image processing and conversion problems.

compliment for the Dean brothers to hear that their program is held in such high esteem.

Images and Textures

Included with DrawStudio are the Deans' two other graphics packages, ImageStudio and TextureStudio. ImageStudio is what set started the series in 1994. Designed to give the casual graphics user on the Amiga the ability to convert image formats from one to another and have a few handy image processing routines thrown in too, the program makes an excellent compliment for DrawStudio in the way that illustrations produced in one program can be processed in the other.

ImageStudio operates in 24-bit. You are therefore limited to the number of colours your Amiga supports when it comes to displaying them, although Cybergraphics card owners can have the full Monty of two dozen bits on screen at once. There's no need to worry about running out of memory when manipulating such images as ImageStudio has internal routines to conserve RAM. It does this by storing the data it is working on in 'virtual RAM', otherwise known as your hard disk.

To run this software you will need several free megabytes of hard disk storage space and a minimum of 1Mb of free RAM. So you really need an Amiga with 2Mb of RAM as a minimum. Oh, and Workbench 2.0 or better.

ImageStudio will import all types of IFF image file, BMP, GIF, JPEG, PCX, and Targa. It will export in them too as well as EPS. Once you get your image into the package, you can scale it to the size you want, reduce or increase the colour depth, change the brightness, contrast, gamma, or colour balance, flip it, roll it, or convert it to greyscale. Versatile, isn't it? And there is more.

Users with scanners will be pleased to know that there is a 'remove isolated pixels' function that cleans up images, while the range of supplied convolutions like sharpen, emboss, texture, blur, and chisel among others, is enough to get you well down the road of image processing. Throw in an ARexx interface and you're laughing.

TextureStudio is a little more involved. Designed for users of Imagine rendering software, TextureStudio allows you to adjust the parameters of the textures by means of simple slider controls. It can then be quickly mapped and rendered onto a choice of a sphere, cylinder, or plane for a preview or as a 24-bit IFF, JPEG, or Targa image to disk so there's no worry about the need for masses of RAM. What you will need is an FPU chip as TextureStudio will only operate if you have one of these.

Conclusion

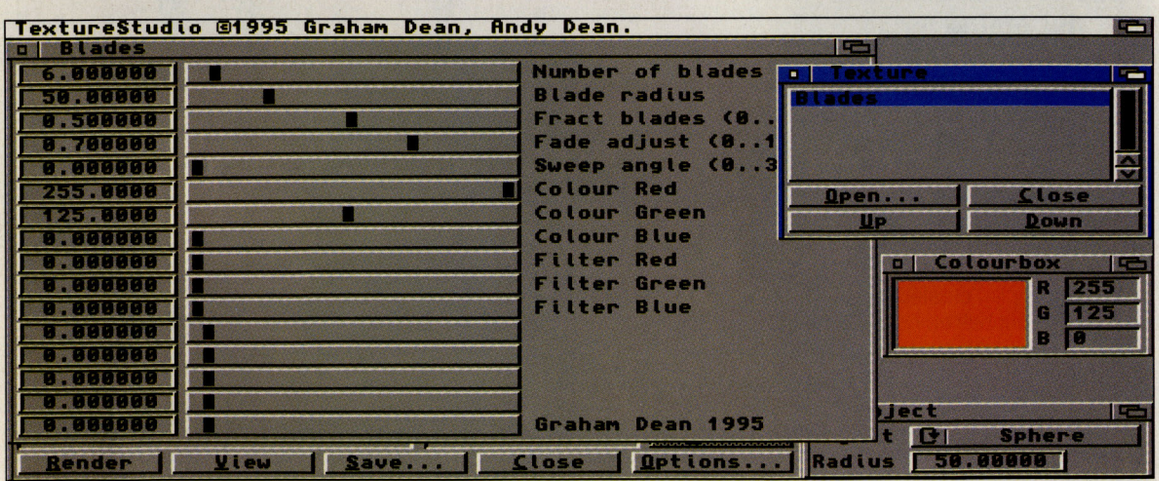
DrawStudio is a novel development on the structured drawing front. It has many if not more of the features found in its more expensive 'professional' rivals. It does lack a trace facility though (a function that allows you to load a bitmap and save it out as a structured drawing), 24-bit printing, and Illustrator 88 file format support. These latter two, we are told, will follow shortly.

ImageStudio is very comprehensive in what it can do and, if you cannot obtain Art Department Professional or afford ImageFX, then it is very handy indeed. As for TextureStudio... if you're a render fanatic them I'm sure it will be a useful tool, but for those of us spared the delights of all-night sessions in front of the monitor using Imagine and its ilk, it is a bit superfluous.

LH Publishing supply many examples of textures and images for all the programs supplied so that you can gain inspiration and learn the ropes. These are stored safely on the CD. The programs themselves, unfortunately, must be run from the hard disk.

Those of you have already paid £15 for a registered a version of ImageStudio may find the price of DrawStudio a little high. To upgrade to the CD version of the software will set you back £64.95. A floppy version, which contains just DrawStudio, costs £49.95 for the upgrade; a saving of £10 on each.

Is it worth it? DrawStudio is going be judged in relation to cost of Amiga paint packages. With Cloanto's Personal Paint 7.0 on CD-ROM only costing £29.99 and Photogenics £59.95, it may seem steep at £74.95. But what swings it for me are the printed manuals you get for both DrawStudio and ImageStudio. You can't beat 'em! ***AUI***



TextureStudio gives you lots of control over textures via its easy-to-use GUI.

INFO

DrawStudio on CD-ROM
Rating: 91%
PRICE
£74.95
CONTACT
LH Publishing
13 Bairloch Avenue
Bletchley MK2 3DH
Tel. 01908 370230

AMIGA REPAIRS

FIXED PRICE ONLY £38.99 Incl. (A500/+, A600 and CD32 only)

- Price includes PARTS, LABOUR & VAT
- 90 Day Parts and Labour Warranty
- 24 Hour turn-around on most repairs
- Includes FULL DIAGNOSTIC, SERVICE & SOAK
- Upgrades fitted free with repair
- If drive/keyboard needs replacing add £10.00 (add £6.00 for return carriage)

Established 16 Years

AMIGA A1200 Repairs only £48.99 Fully inclusive

Repairs while-you-wait add £10.00

COMPONENT SPARES

We are the largest distributor and retailer of Amiga spares in the UK, with an inventory of some **150,000+** parts. Large quantity discounts and catalogue available to trade.

LOW PRICE

SPECIAL OFFERS

WE CAN SUPPLY & STOCK EVERY AMIGA SPARE

A500 Internal Drive	£28.99	A500/600/1200 PSU	£25.99
A600/1200 Int Drive	£28.99	A1200 Keyboard	£34.00
KickStart 2.05	£19.90	A600 Keyboard	£19.00
Super-Buster IC	£15.00	A500 M/Board v6	£58.00
A520 Modulator Xchg	£18.00	CD-32 PSU	£25.00
8520 CIA	£12.00	CD-32 CDROM Drive	£35.00

CHIPS | KEYBOARDS | CASES | PSUs | DRIVES | PCBs

AMIGA PC KEYBOARD ADAPTOR (All Amigas) £25.00 PC Keyboard £16.00

DART Computer Services
105 London Road
LEICESTER
LE2 0PF

SALES
(0116) 2470059
FAX (0116) 2558643

Postage & Packing add £3.00

The Guild of Master Craftsmen

DART Computer Services

ONLiNE PD

Tel: 01704 834335 /834583 BBS: 01704 834583

SPECIAL SOFTWARE PACKAGE DEALS

FULL GUI INTERNET PACKAGE (HD REQ.) - 26 DISKS	£18.00
FULL GUI INTERNET & COMMS PACKAGE (HD REQ) - 33 DISKS	£22.50
COMMS PACKAGE - 7 DISKS....£5.25/KIDS DISKS (EDUCATIONAL) #1-7 DISKS	£5.25
MAGICAL USER INTERFACE PROGS. #1 & #2 - 12 DISKS PER PACK	£8.25 EACH
ADOBE FONTS #1, #2, #3, #4 & #5 - 15 DISKS PER PACK	£10.50 EACH
COLOUR IFF FONTS #1, #2, & #3 - 15 DISKS PER PACK	£10.50 EACH
MONO IFF FONTS #1 & #2 - 13 DISKS PER PACK	£9.00 EACH
IMAGINE TEXTURES/OBJECTS - #1, #2 & #3 - 9 DISKS PER PACK	£6.75 EACH
SPECTRUM GAMES #1, #2, #3, #4, #5, #6, #7, #8 - 16 DISKS PER PACK	£11.25 EACH
SPECTRUM GAMES #9 - 11 DISKS PACK £7.50 OR ALL 139 DISKS FOR ONLY	£85
COMMODORE 64 GAMES #1, #2, #3 - 12 DISKS PER PACK	£8.25
COMMODORE 64 GAMES #4 - 11 DISK PACK £7.50 OR ALL 47 FOR ONLY	£30
CG (COMPUGRAPHIC) CLIP ART #1 - 9 DISKS	£6.75
CG FONTS #1, #2, #3, #4 & #5 - 15 DISKS PER PACK	£10.50 EACH
CG FONTS #6 - 12 DISKS.... £8.25 / SAMPLES VARIOUS 300+ - 11 DISKS	£7.50
DESKTOP VIDEO #1 & #2-12 DISKS PER PACK....£8.25 / VIDEO GOLD – 10 DISKS	£6.75

FREE P&P ON ALL ABOVE PACKS

POSTAGE & PACKING

UK PD ORDERS	75p per order
100 Capacity Boxes	£2.25 Each
Mouse/40 Cap Disk Box	£1.00 Each
Mouse Mats/3.5" Cleaners	£0.75 Each
500 Labels . £1.50/1000 Labels	£3.00
Other Peripherals	£1.25 Each
A500/A500+ & A600 Memory	£1.50 Each
A1200 Memory/Magnum 030	£4.00 Each
Modems/Hard Drives Etc	£7.50 Per Order

BLANK DISKS

10-20 Disks	35p Each
21-499 Disks	30p Each
499-999	25p Each
1000+	POA

HI- QUALITY DISKS. 1 FOR 1 REPLACEMENT GUARANTEE. ABOVE PRICES INCL. LABELS & FREE P&P. (MIN ORDER 10)

Phone for your **FREE** 3 disk catalogue OR send 39p SAE OR 75P
(ALL ORDERS SEND OUT BY 1st CLASS RETURN POST)

PERIPHERALS

100 CAPACITY LOCKABLE DISK BOXES(beige with smoked lid)	£4.49
40 CAPACITY DISK BOXES (beige with clear lid)	£3.50
10 CAPACITY BOXES (perspex/white)	£1.20
UNIVERSAL PRINTER STAND	£5.99
B&W/COLOUR INK JET REFILLS (compat with 300+ printers)	£11.99/£18.99
MOUSE MATS (RED / GREY & GREEN)	£1.49
A1200 & A600 DUST COVERS	£3.49
DISK DRIVE CLEANER	£3.49
CRUISER MULTI COLOUR JOYSTICK	£10.99
COMP. PRO EXTRA CLEAR JOYSTICK	£12.99
COMP. PRO EXTRA MINI CLEAR JOYSTICK	£10.99
560 DPI 3 BUTTON MOUSE (BLACK/BEIGE)	£14.99/£12.99
1000/500 COLOUR WRAP AROUND DISKS LABELS	£7.99/£3.99
1000 TRACTOR FEED LABELS (2 ACROSS)	£5.49

WE STOCK 11,500+ PD DISKS ALL AT 75P EACH! SO IF THERE IS A DISK YOU ARE LOOKING FOR & CAN'T FIND IT. WE MAY HAVE IT! PHONE NOW & FIND OUT.

COLLECTIONS IN STOCK: FRED FISH 1 TO 1000 ASSASSINS GAMES 1 TO 261 LSD UTILS 1 TO 149 + MORE

SPECIAL OFFER

33.6K/V34 DYNAMODE MODEM ONLY £139.99



Many more hardware products available please phone

HARDWARE

Dynamode Modems (Incl. 2Yr Warranty & FREE £35 starter pack)

Modems in Beige colour to suit Amiga	Modem only	Modem & GP Fax
14.4K/V32Bis **(Amiga User International 90%)**	**£79.99**	**£119.99**
28.8K/V34 **(Amiga User International 94%)**	**£119.99**	**£159.99**
33.6K/V34 **(Amiga User International 96%)**	**£139.99**	**£179.99**

All Modem packs come with Group 3 14.4k fax, **BT & CE Approved**. 112/23 page manual, serial lead, phone lead, installation guide, UK PSU, **FREE PACK INCLUDES:** 33 DISK SET OF SOFTWARE for use with the **INTERNET, BBS's, FAX, COMMS/INTERNET GUIDES**, getting started information leaflets including information on BBS's, Internet basics, popular smiley examples!, useful numbers etc. Double phone adaptor & **10MB of FREE BBS credits.**

★ ★ ★ **Our Modems packs CANNOT be beaten by anyone else!** ★ ★ ★

● ● **Dynamode Modems are highly rated in ALL the Amiga Magazines** ● ●

GP Fax (The Ultimate Fax Software Solution) **£44.99**

All memory boards below come with *5 FREE PD DISKS* of your choice if requested

A1200 Memory Boards – speed increase of over 2.3 times (Includes clock & FPU socket)
OMB-**£49.99** / 4MB- **£89.99** / 8MB - **£119.99** / 33MHz FPU - **£29.99**

A1200 Magnum 68030/68040 & 68060 Accelerator/Memory Boards (incl clock & FPU socket OR built in FPU). Prices Starting From **£99.99**

A500 / A600 Memory Boards A500 to 1MB **£19.99**
A500+ to 2MB ..... **£24.99** /A600 to 2MB **£24.99**

A1200 1Gig Hard Drive **£169.99**
Other Hard Drive sizes available ..... **£POA**
HD Fitting Service. ..... **£19.99 / 3.5" HD LEAD INCL. Power.** **£19.99**

CHEQUES & POSTAL ORDERS PAYABLE TO:
ONLiNE PD, DEPT AUI 3, 1 THE CLOISTERS, HALSALL LANE, FORMBY, LIVERPOOL, L37 3PX

CARE QUALITY & SERVICE

CARE QUALITY INKS • • • •

QUALITY INK JET & BUBBLE JET REFILLS

Our refills use only top quality inks. You buy direct from us hence our superb quality at sensible prices.

Black refills for HP Deskjet 500, 510, 550, 500C, 550C, 560C, 660C, 850C

CANON BC-01, BJ103/EX/SX/ BC-02, BJ200, BJ130, BJ300, BJ330

EPSON STYLUS 800, 1000 CITIZEN PROJET. OLIVETTI JP150, 250, 350.

6 refills (3 on high capacity cartridges) kit 120ml pure black £16.99

CANON BJC600, BJC4000/4100 20 refills pure black 120ML .. £16.99

EPSON STYLUS 4 refills 120ml pure black £16.99

TRICOLOUR REFILL KITS:

HP Deskjet range 10 refills of Yellow, Magenta & Cyan 180ml .. £24.99

CANON BJC600, 4000/4100 10 refills of Yellow, Magenta & Cyan 180ml £24.99

EPSON STYLUS COLOUR/II/IIS Yellow, Magenta & Cyan 180ml £24.99

"Print Head Recovery Fluid" for unblocking nozzles new larger size, new lower price £6.99

All kits come with full instructions • Other refills available.

Important: Please state type when ordering

T-shirt printing is simple, just print onto normal paper & iron on. One ribbon gives lots of prints. We can also supply ribbons in many colours, T-shirt and normal ink.

Prices include VAT & postage. To order send cheques/PO payable to:

CARE PRODUCTS

Dept AUI8, 15 Holland Gardens, Watford, WD2 6JN

Access or use Visa/Mastercard or Education order. VISA

Fax order line 01923 672102

COLOUR PRINTER ribbons & reloads

To Reload a ribbon is easy, just remove the top, take out the old ribbon & reload it with a new one.

	Complete ribbon	One reload	Five reloads
Citizen Swift/ABC/240 etc	£11.95	£6.99	£29.95
Panasonic KXP2123/2124/2180	£9.99	£6.99	£29.95
Panasonic KXP2135	£9.99	£6.99	£29.95
Star LC200 9pin	£9.99	£5.99	£29.95
Star LC24-10/20/200	£9.99	£6.99	£29.95
Star LC24—30/LC240	£8.99	£4.95	£19.99
Seikosha SL95	£14.95	£6.99	£29.95

Black Printer Ribbon Reloads

Citizen Swift/ABC/120D 5 black reloads	£9.99
Star LC10/20/100 5 black reloads	£4.99
Star LC24 range 5 black reloads	£9.99
Seikosha 1900/2400/SL95 5 black	£9.99
Epson FX80 to LQ800 range 5 black	£11.99
Star LC24—30/LC240 5 black reloads	£14.99

Special Re-Ink

For Panasonic 1080/81, 1123/24, 2123/80, 2135, Star LC200 9pin, Epson LQ100/150, Oki 182 to 390 range. Black bottle will re-ink 100+ ribbons. £9.95

T-Shirt Printing Ribbons

4 col Citizen Swift/ABC/240	£19.99
4 col Panasonic 2123/2135	£19.99
4 colour Star LC200 24 pin	£19.99
Reloads for above	£9.99
4 colour Star LC200 9 pin	£12.99
4 colour Star LC10	£10.99
Reloads for above	£7.99
Black Citizen Swift/ABC/120D	£9.99
Black Star LC10	£9.99
Black Star LC200 9 pin	£9.99
Black Pan KXP1080/81	£9.99
Black Pan KXP1123/24	£9.99

• • • • CARE QUALITY INKS

TEL ORDER LINE 01923 894064

Up With The Elite

Amiga videographer Chris Bates is one of the few expert at using Broadcaster Elite in the UK. David Ward interviews him on how this program helped him make the jump into a new profession.

AUI: How did you get started in the video business?

About eighteen months ago I took voluntary redundancy from a relatively secure job to start my own video production/computer graphics business. This was something I had been planning for a long time and I would have made the move several years earlier but I managed to get an internal transfer to work in a video production unit. The one factor that enabled this move was my knowledge of the Amiga and DPaint.

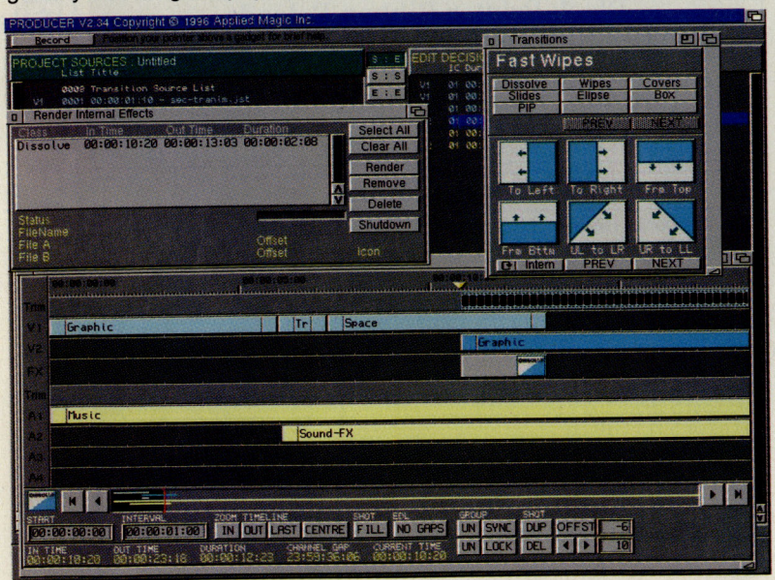
In retrospect this was a great move. At that time I was competent on the graphics side but, to be honest, I didn't know very much about video. I thought I did, but the world of Betacam, time code, crossing the line, and so on brought me down to earth. It was invaluable leaning experience.

AUI: Having experienced professional video, how did you see yourself setting up?

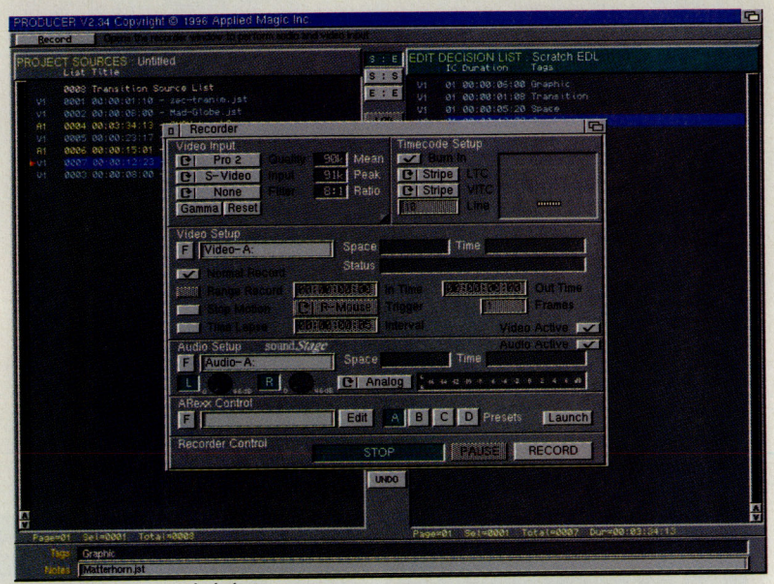
As the day when I would kiss goodbye to a regular pay cheque at the end of every month came closer I had to give thought to my equipment requirements. In a conventional linear tape editing system I would require a three machine edit suite, a video mixer, an audio mixer, and an edit controller capable of running all these items. Plus time base correctors on the source machines and a system capable of performing frame accurate edits. In addition I would require equipment to put computer graphics onto video. By this time I was addicted to Lightwave, so a good genlock and PAR card would be on the list (I already had an Amiga A4000).

Most of the work I hoped to do would end up on a VHS tape so I would have chosen an S-VHS suite. If you tot that little lot up your looking at over £10,000.

As I said that was based on a tape system, I had by this time seen the future in the form of an Avid non-linear editor running on a Mac. It was, at £42,000, way out of my budget, but an afternoon spent playing with one convinced me this was the way to go. It was impressive. It also crashed twice and neither I nor the people that owned it could get it to multitask properly.



Producer screen, transition, render and time line window.



Producer screen, record window.

Using the Avid as a benchmark I set out to find a non-linear system within my budget that met my requirements. I narrowed it down to two, the Fast system on the PC and the Broadcaster Elite on the Amiga.

It's the closest I've been to buying a PC, this was around the time that Escom emerged as the saviours of the Amiga and everything was going to be okay. Both systems had similar specifications, the Broadcaster Elite however was the winner on price and I wanted to stay with the Amiga rather than increase Bill Gates' bank balance.

AUI: What else did you need before you could start editing those video masterpieces?

The Broadcaster Elite is a Zorro III card manufactured by an USA company Applied Magic for an Amiga A4000. I had to make sure that the CPU daughterboard in my machine was Rev. 3.1 and its U209 chip Rev. 02. The card had all the video connections I could ever need via an external breakout box with input and output connections for composite, Y/C, and component Y/B-Y/R-Y, other connections exist for LTC in and out, CSYNC out, genlock in, and black burst.

The Elite card is capable of digitising the incoming video in real time at 25 frames per second and at different quality levels up to broadcast standard. The data is compressed into a JPEG format called Jstreams and saved directly to disk. A large, fast hard drive was essential. Applied Magic recommended the Seagate Barracuda because the higher the quality level you use, the more space is taken on the drive. At the highest quality level you should expect to get about 4.5 minutes of video per gigabyte. At a lower level, around S-VHS quality, this goes up to about 8 minutes.

The hard drive required a SCSI-2 controller, so the Cyberstorm or the A4000T internal

SCSI controllers are fine. Other controllers, like the Fastlane will work, but it depends on which version you have.

I also needed a sound card, for the audio is another item that was on the shopping list. Early versions of the system used the Sunrize AD516 card which, in my opinion, was the weakest part of the system. It allowed little control over audio levels. The only other sound card currently supported is Applied Magic's own Soundstage. This card is much better at running 4 simultaneous CD quality audio tracks, makes adjusting fades and mixes easy, and the board has 4 balanced XLR outputs and 2 balanced XLR inputs plus digital inputs and outputs for use with my DAT deck. An additional fast SCSI-2 hard drive was needed for the audio but it didn't have to be as large as the video drive.

Two monitors were necessary, one for the Amiga and one for video. Almost any standard Amiga monitor can be used although the old Commodore 108x series monitors are not recommended. I chose multistandard monitors. A graphics card is an optional extra.

AUI: How much RAM did you need to fit to the A4000 to accommodate all this?

The minimum memory requirement is 4Mb of Fast RAM and 1Mb of Chip, but I started out with 8Mb to get the best out of the Broadcaster Elite.

Back Up

I'd better add that a couple more items are very useful. One is a TBC on the source video. The Broadcaster Elite will work without it, but if it looses sync from a bad edit or even a glitch it will corrupt the Jstream. I have used my system with a top-end domestic deck which has a built in TBC, most of the time it's okay but every now and again it suffers from this problem. The other item is a backup DAT drive for saving Jstreams that fill up the hard drive rather quickly.

AUI: What are the software requirements?

Broadcaster Elite comes with its own software called Producer. This does the editing for both video and audio, provides ARexx scripting and some other useful tools. Producer does everything required to make a professional broadcast quality video. However, for the more creatively inclined, ADPro v2.5 will be useful. This is what the ARexx scripts are for. ImageFX2 is another program I find useful as it has a loader and saver for Jstreams.

Almost any standard Amiga monitor can be used although the old Commodore 108x series monitors are not recommended.

Applied Magic have recently released a programme called Audio Lab to enhance the audio capabilities of the Soundstage card but I haven't used it myself.

AUI: Did you put this all together yourself?

No, my Broadcaster Elite came assembled and configured in a 4000/040T. After setting it up, connecting the breakout box and video deck, I turned the power on booted up and clicked on the Producer icon and was ready to start. Now I'm afraid, and sometimes to my cost, I'm the sort of chap who dives in and reads the manual later. Producer, though, is easy to use and presented no major problems. The main screen is split into two halves called work areas by a column of buttons. The default setting uses the left side for source material and the right side for the EDL. In the top left corner of the screen is the record button. Clicking on this brings up the recorder window. This has a number of buttons for setting things like NTSC/PAL, composite, Y/C or component inputs, the quality level you want to record at, and timecode (Producer reads and writes LTC and VITC timecodes). You also have to give the Jstream that you about to record a name, which is automatically passed to a similar window in the audio setup assuming you wish to record both together. you can, of course, record audio and video separately. Two boxes now give you feedback about the amount of spare drive space and the approximate amount of time you can expect to record.

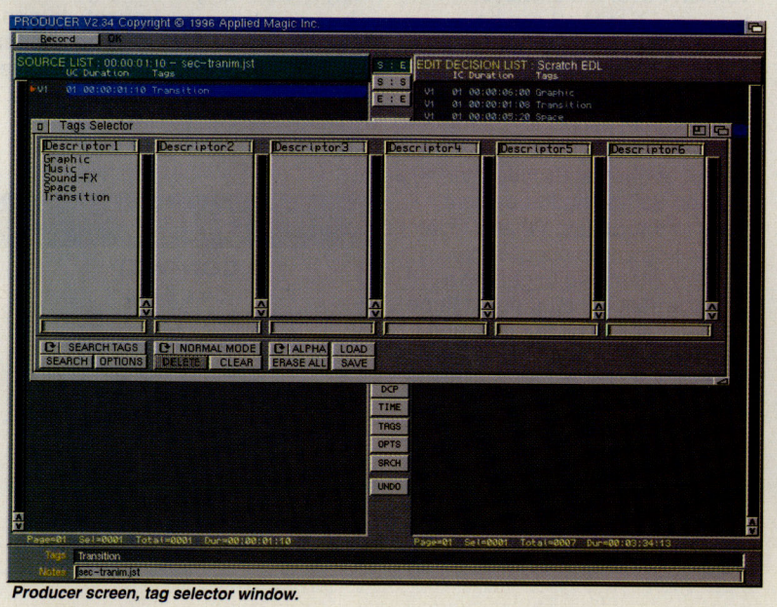
AUI: Is it easy to use?

When you've set-up, it is just a matter of running the VTR and clicking the record button. Click stop when you're finished. Then, on exiting the record window and returning to the main screen, the new Jstream and audio track are listed in the project source list. One thing I didn't like about this system when I first saw it was that it didn't use thumbnails for shot identification, but now I've been using my system for some time it's not bothered me. Sometimes thumbnails can be confusing, especially when your video is made up of identical looking shots.

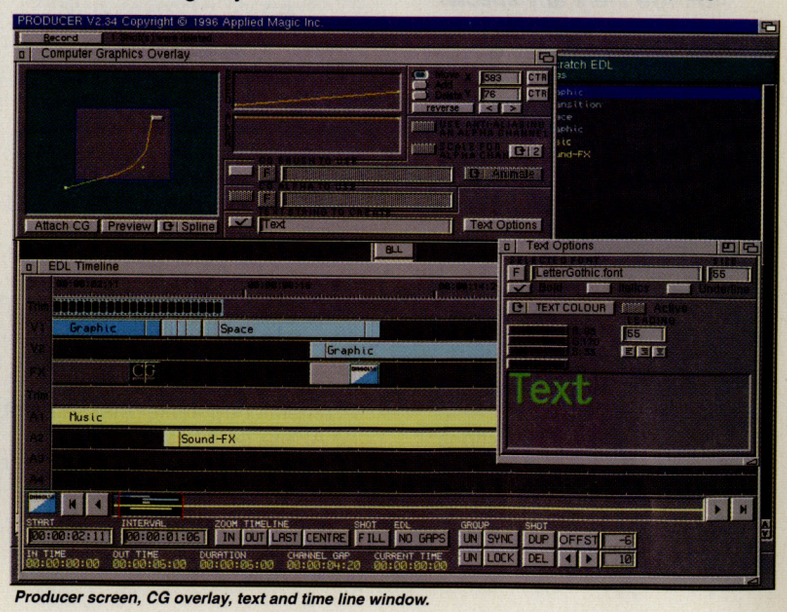
The Jstream that has been recorded may contain several different shots, these shots can now be logged by selecting in and out points. It doesn't have to be accurate at this stage as they can be trimmed later. Notes can be added to the Jstream and the

Easy Access

CG - Computer Graphics.
DAT - Digital Audio Tape. An audio recording system that saves the data in digital form on a magnetic tape that is helically scanned.
EDL - Edit Decision List. A display showing the length and place of scenes to be assembled into a final cut.
LTC - Longitudinal Time Code. A signal recorded within a videotape's audio track used for syncronization purposes.
TBC - Time Base Corrector. A device that reads and acts upon time codes.
VITC - Vertical Interleaved Time Code. A time code hidden within a video signal. More accurate than LTC.
VCR - Video Cassette Recorder.
VTR - Video Tape Recorder. A term used in the days when video recording was done on open reel decks. Nowadays used to refer to professional duty VCRs.
XLR - A heavy duty professional DIN-style connector for microphones.

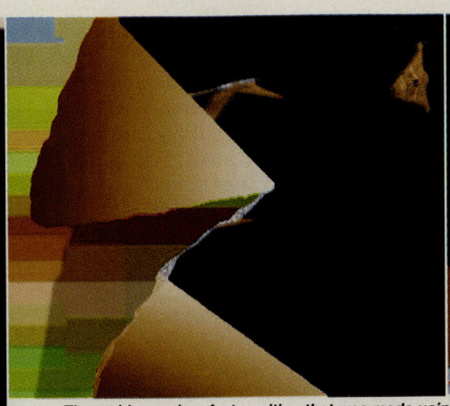


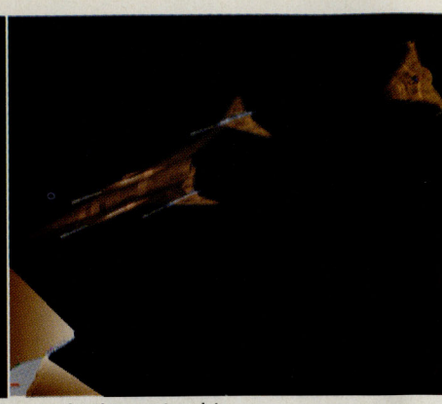
Producer screen, tag selector window.



Producer screen, CG overlay, text and time line window.







Three video grabs of a transition that was made using an animation as a template.

shots can have identifies called Tags attached to them such as the type of shot, location, actor's name, and so on. This can be useful in a large project as the shots can be automatically accessed using a Tag selector window.

Complete Jstreams and logged shots can be transferred over to the project EDL and it's here that the video is assembled on the timeline. Shots can be rearranged by dragging them with the mouse and placed on one of two video channels and they can be trimmed for precise edits and overlapped to form a transition. Four audio channels are available on the timeline, the audio can be moved, trimmed, and adjusted for the required level.

Like Toaster

AUI: Are there any special effects such as found in VideoToaster?

Producer comes with a number of transitions, dissolve, wipes, covers, slides, ellipse, box, and PIP. Transitions can't be performed in real time, they have to be rendered and that's the difference between it and the VideoToaster. Having a Soundstage card is an advantage as its DSP chip is used to reduce rendering times. Luckily the rendering process multitasks so editing can continue.

This rendering of transitions can be performed internally by Producer or externally by third party programs. Some of the ARexx scripts that come with Producer are useful here as, although internal rendering is fast, external ones provide more options. Some impressive external transitions can be created using black and white animations as a template with the A source showing through on the black and the B source on the white

On the subject of rendering, Producer has a CG overlay facility. A text string can be typed in and made to scroll across the screen with font size, colour, outline, and drop shadow all being controlled along with speed and position of the text. It's not as easy to use or as powerful as Scala, but it does the job.

The software is easy to use and not prone to crashing and regular updates are available free of charge over the Internet.

Bitmapped images, animations, and brushes can be imported into the CG overlay too. They have to be between 2 and 256 colours and the animations in a series of frames, e.g. .001, .002. The speed of theanimations can be changed, they can be looped, bounced, or fitted to length. Unfortunately the CG overlay has to be rendered in the same way as transitions.

I mentioned earlier that some of the ARexx scripts are used to generate external transitions, other scripts are for such things as extracting a sequence of fields or frames from Jstreams. The extracted frames are IFF24s that can then be processed in other programs and converted back to Jstreams. Two Jstreams of different quality levels can't be edited together in the same EDL, but a script for converting quality levels overcomes this. One more script composites one Jstream on top of another with control over mixing.

The tools that come with Producer I find very useful for slow motion, reverse playing, and changing the length of the Jstreams. They can also extract fields and frames without using ADPro.

AUI: What is your view of the system now?

My overall opinion of Broadcaster Elite is that it's an excellent piece of kit for editing video and compiling animations. The main factor for me being in the quality of the video output and that it meets my requirements. The software is easy to use and not prone to crashing and regular updates are available free of charge over the Internet.

My Broadcaster Elite came with a preliminary manual, the final version never materialised. However, a manual can be downloaded as an HTML document from the Web. The hardware side of things does concern me, especially as my warranty has expired. The video output of the first Broadcaster packed up and had to be sent back to the States. White Knight Technology, who supplied the system, managed to get me a replacement but after about three weeks that one bit the dust and I was without an editor for three or four weeks until my original board came back.

White Knight no longer act as distributors for the Broadcaster Elite in the UK although they do still hold a limited stock. Applied Magic are developing a PC version of the Broadcaster, if they are to make inroads into in this area as well as the Amiga market they must find a new distributor who holds spare cards to reduce the repair time as the people using this system are trying to make a living from it.

A friend of mine purchased a Fast system around the same time as I bought my Broadcaster. He paid around £4,000 more, but when his went faulty it was covered by on-site warranty and in the same day a new system was provided.

The only other problem I have to live with is the data on the video hard drive fragments with use. The consequence is dropped frames. To rectify the problem I clear out the partition and do a quick format.

AUI: Would you recommend Broadcaster Elite?

I've edited hundreds of videos on tape edit suites that resembled NASA's mission control... Four monitors, switches, buttons, sliders, knobs to twiddle, and all that. This can now be condensed into one computer and controlled by a mouse. I like my Broadcaster Elite and I would recommend anyone thinking of making the quantum leap into non-linear editing to give it a test drive. I'd give it 90%. ***AUI***

TOP FLOOR PRODUCTIONS

INFO

CONTACT

Chris Bates
Top Floor Video Productions
77 Knighton Church Road
Leicester LE2 3JN
Tel. 0116 270 9629

Applied Magic Inc.
2234 Rutherford Raod
Carlsbad
California 92008
Tel. + 619 931 6417

Prime Philips

John Russell is quite taken with the Philips VR665, a highly specified, low-priced video recorder.

What first struck me about the Philips VR665 video recorder when we removed it from the egg-box style packing was its plainness. It is a simple black box with a centre slot for insertion of the cassette, beneath which lies the black plastic window that covers the LED display. To the left is a large Stand-by button and three tiny, slightly recessed, buttons that control Autoinstall, Install, and Store.



The Philips VR665, value and quality for money.

To the right of the cassette slot are the main tape controls: Eject, FF Record and REW. This last feature is not as fast as last month's tested VCR - 260 seconds on the Philips compared to Hitachi's 85 with an E180. The controls are laid out in a distinctive pattern around a figure of eight shape with Stop and Play in the centre of the 'loops'. This is a complete departure from the more usual line of buttons often found on tape equipment. The arrangement makes operating the VCR in the dark easier as you can learn where the buttons are in relation to this tactile figure of eight. You should only need to worry about this when you have mislaid the remote control.

Features such as dual speed and Hi-Fi stereo are often found on decks much more expensive than this, but you would hardly expect to have NTSC playback as well.

The Philips VR665 is a four head machine capable of long play operation. It also has a Hi-Fi NICAM Stereo for superb sound reproduction through a suitably equipped Stereo TV set. The VCR also has a separate pair of phono sockets which allow you to connect it to a component H-Fi system for that 'Home Cinema' experience.

The back of the machine has two SCART sockets: one for output to the TV, the other for input from a Satellite or Cable television decoder; aerial in and out, and a socket for the detachable mains lead. These connectors are mounted on a circuit board that traverses the rear of the VCR behind the back panel. When we plugged in our SCART lead, it moved disconcertingly under the pressure of insertion. This gave the impression of it being 'flimsy'. Similarly, the outer casing flexed a little too much for us to be confident about its ability to withstand a portable TV atop it.

Nevertheless, the facilities the VR665 offers for its price certainly make up for this. Features such as dual speed and Hi-Fi stereo are often to be found on decks much more expensive than this, but you would hardly expect to have NTSC playback as well. This is quite an achievement. Now add in VideoPlus and PDC (Programme Delivery Control) and you can see why this machine has won a "Best Buy" award in a leading video magazine.

Sound and picture quality in both long play and standard play modes were excellent, although the still frame was a little too flickery for our liking. Luckily we have a couple of NTSC format video tapes, so we were able to test the deck with them and a TV that also handles the NTSC playback frequency of 60Hz. Playback of the picture and stereo soundtrack was just as good as that on the PAL tapes, but the still frame facility did not function although forward and reverse picture search did. Three slow motion speeds are available at 14%, 10%, and 7% of normal speed in all modes.

Those of you worried about Channel 5 interfering with your enjoyment of videos will be pleased to hear that the VCR's built-in modulator can be retuned, or even switched off.

The VR665's dinky little remote control operates many of the VCR's functions including channel changing, tape transport, and programming. The deck uses a combination of on-screen display (OSD) and information via its alpha-numeric LED front panel display to tell you what's going on.

Self Tune

The VCR can self-tune and set-up the timer's clock automatically using the Autoinstall routine, or you can set it up yourself with the manual Install feature. You can set the clock and TV channels to your own satisfaction, the channels being selected as numbers (i.e. 21) or frequencies. The timer can be set to record six events in any 31 day period.

Those of you worried about Channel 5 interfering with your enjoyment of videos will be pleased to hear that the VCR's built-in modulator can be retuned, or even switched off, via the remote control and the OSD. The 'tracking' of the tape during playback is also altered in this way should it be necessary to override the in-built autotracking circuitry.

Another feature that we found interesting was 'head cleaning'. There should be no need for a cleaning tape on your shelf as this is achieved by a vaned soft plastic wheel brushing the head drum momentarily every time a tape is loaded and unloaded or the VCR is instructed to deliberately carry out the operation during playback.

Conclusion

Aside from our quibbles about build quality, the VR665 is a distinctly capable deck with many features that are usually only found on more expensive machines. This makes it an excellent choice for those of you on a budget looking for a machine with lots to offer per pound... Sterling rather than avoirdupois, although that analogy also holds true for this is quite a lightweight deck too.

The Philips' VR665 is definitely a "Best Buy". ***AUI***

INFO

Rating: 92%

PRICE

RRP: £349.99

£30 off at selected outlets.

CONTACT

Philips Consumer
PO Box 298
420 London Road
Croydon, Surrey
CR9 3QR
Tel. 0181 665 6350

POWER TO THE AMIGA

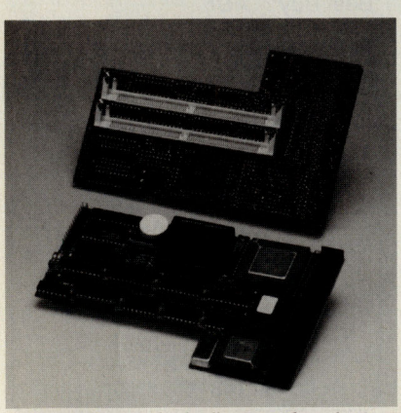
One of the best-known names in the Amiga business, Power Computing, is celebrating its tenth anniversary of being involved with the Amiga this year. Ashley Cotter-Cairns went to discover the history and find out what the future holds.

Born in Pescaro, Italy, in 1950, Tony Ianiri came to live in the UK in 1972 and worked in engineering. He started his first computer company just over a decade later.

Although the ST had a head-start, Tony recognised the potential of the Amiga immediately. "We did the very first 512k RAM expansion for the Amiga. At the end of 1985, we sold 1,500 of these in a single week! Obviously the market was growing and it seemed like the ideal extension of our business."

The business, then called Sandy UK was already established and originally was dedicated to supplying peripherals for the Sinclair Spectrum and QL. "Of course, the QL didn't quite work out as well as everyone had hoped," Tony Ianiri recalls, "but despite its short life, we still sold 15,000 units of our Super Q board and over 20,000 floppy drives." (The Super Q had a 512k RAM expansion, a mouseboard, parallel and floppy drives, and on-board toolkit.)

When Atari launched the ST in 1985, Sandy UK began to support that too. The company designed its versions of the most commonly bought peripherals: floppy disk drive; RAM and ROM upgrades; external hard disks; and scanner. The company also distributed software for third parties.



Power sell the popular Apollo range of accelerators.

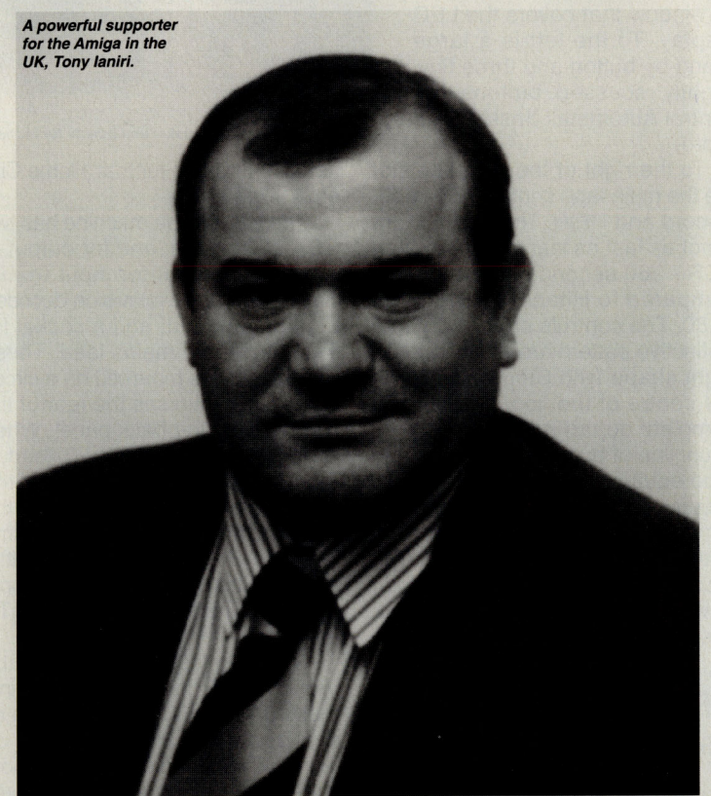
What Goes Around

The company soon employed two full-time engineers whose only task was to produce peripherals for the Amiga. Power Computing was born in 1987 and this tied in with Tony Ianiri bringing in GVP products: "We were the first European company to import them and they were extremely successful." During 1988, Power sold $500,000 worth of GVP product; in 1989, that figure almost doubled. GVP then took over its own distribution and, although Tony Ianiri tried to maintain his existing customer base, it was clear that Power had lost most of a very lucrative niche at a stroke. However, this failed to dampen their spirits, as the good times were rolling.

Later, ironically, GVP hit trouble and virtually disappeared and Power was able to get hold of the rights to the products that it had done so much to popularise in the UK. What goes around, come around, as they say, with a Hertfordshire accent in Bedford, the pretty town where Power Computing is based.

Going Overseas

"The years between 1987 and 1992 were our best times ever," Tony commented. "Power Computing kept getting stronger, one of the biggest companies of its type in Europe. This made us over-confident and we tried to expand too quickly." Power Computing opened subsidiaries in Italy and France in 1992, only to close



A powerful supporter for the Amiga in the UK, Tony Ianiri.

them after Commodore went belly-up. 'We took a loss on them," Tony Ianiri admits sadly.

With Commodore making lots of noise and little else, Power Computing's market was becoming almost stagnant.

The boom was over, now the bust cycle began. With Commodore making lots of noise and little else, Power Computing's market was becoming almost stagnant as users became tired of waiting to see if their machine had a future. "We started to downsize the business," Tony Ianiri says. "We have always maintained a good reputation, I hope, so my primary concern was to keep the existing customer base as happy as possible." That meant working harder to find new products and let his customers know that their beloved Amigas were worth hanging on to.

Today, when the majority of Amiga owners are very loyal and satisfied in the knowledge that their machines are far better, specification

and value, than PC equivalents, Power's role is far different. "We've had a good time with the Amiga," Tony Ianiri comments "and though it's a machine I still want to support, I have to be realistic. I will be looking to expand into other markets, but Amiga owners should be aware that Power will always be there for them. Providing, of course, Amiga owners are there for Power."

Amiga Tomorrow

The Power Boss commented on what he thought would happen in the next few years of the Amiga's life.

"The problem is the uncertainty." He replied. "A company could buy the technology, but it's five years old now.

It really needs to use RISC or PowerPC technology. By the time it got to market, what is a good specification today might be outmoded. It's very sad."

Tony Ianiri believes that the years of quiet have done the most damage to the Amiga's future. "Enthusiastic computer users, exactly the type that the Amiga always attracted, got fed up with going years without new products to play with and moved on to Pentium or PowerPC. Software writers were quick to abandon all those machines, too, I think. Whatever happened to all the games manufacturers? They dropped a market of millions overnight."

According to the man who created Power Computing, the fact that the Amiga exists at all is a testament to David Pleasance. "He should be thanked for keeping the Amiga in this country. Without him, there wouldn't be a chance of a revival. But Escom are much to blame. What have they done with the Amiga since buying it? Nothing. They ruined the Amiga. There was no stimulation from the top; no PR, no interest generated. Zero marketing. Everything about the 'relaunch' was a balls-up. Why was the A1200 priced at £400 here when its proven volume price point was £300? Why did it take so long to get them to the shops? Why are these people so incompetent?"

Passionate

By now you may get the feeling that Tony Ianiri is not only passionate about the Amiga, but also extremely disappointed by the way it has been handled in recent years.

"Escom is moaning about having to clear the back stock of the Amiga, but it refuses to lower the trade price.

Why it doesn't knock 'em out cheap to get the market moving again is anyone's guess. Escom has troubles elsewhere and the Amiga is the last of its priorities."

The Amiga is unique, powerful and super value.

New machines aside, there are still millions of existing Amiga users' machine to service - including those of the readers of this magazine. Tony Ianiri has plans for you. "If only half of the existing users, not owners, remain loyal, we'll be there to support the Amiga. It's becoming difficult to get supplies of spares, such as A520 chips. But if the Amiga vanishes, I'll be deeply saddened. What alternatives are there? You have PC or Mac. PCs get cheaper all the time, but the technology is so varied in quality - you might be getting a great machine or a heap of crap for your money and not be able to tell the difference. Macs are ludicrously priced before you buy a monitor, mouse, and keyboard because they don't give you one with it. No, the Amiga is unique, powerful and super value."

Breathless

Power has also published a game, Breathless, which won accolades at its launch in March 1996. A new game, The Big Red Adventure, will be published this year. "It's vital to bring new stuff out all the time, keep the market turning over and the users keen," Tony Ianiri stresses.



Need a replacement drive for your old 500? Power do them.

Even with the best will in the world toward the Amiga, Tony Ianiri says he has to look for other markets to support. PC is the obvious choice, but it's a tough nut to crack. "We're competing with people who shove any old bits into a box and knock it out at bottom dollar," he says. "There's no point in supplying something which might, or might not, function perfectly well for a year or so. That is not a way to generate customer loyalty. We are going to remain small for the time being, building up our reputation locally. We won't be the cheapest, but we'll use the best components and offer the best service." Service, like on-site setup and Windows training, eight hours of maintenance, and continued customer support.

But for now, the PC side is still small. Tony Ianiri knows where his most important market remains: "I thank God for the Amiga. Even today, it is still how we make our living. I don't particularly like the PC: I am more interested in the Amiga, more enthusiastic about supporting it. Long may it live." ***AUI***

Contact: Power Computing: Unit 82A Singer Way, Woburn Road Industrial Estate, Kempston, Bedford MK42 7PU Tel. 01234 851500.

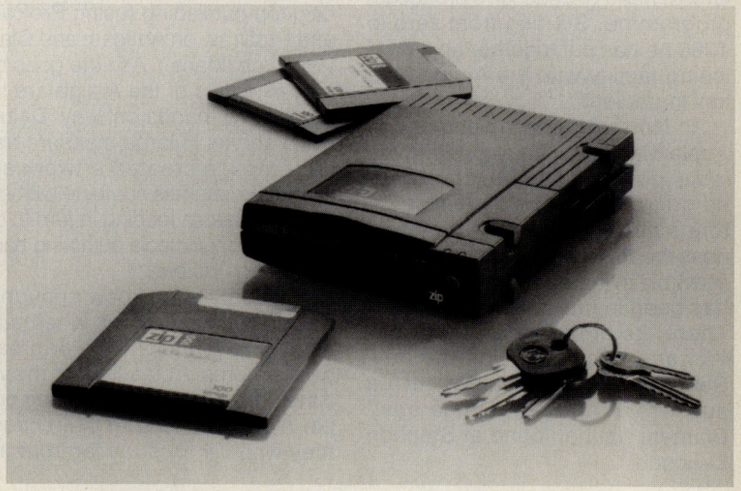
Powerful products

Power Computing have been producing a broad range of high specification products for the Amiga community for ten years. Highlights from this period include the first third-party 512k RAM expansion to rival Commodore's own, expensive, A501 unit for the Amiga A500. This has been followed by cards designed to increase the RAM of the A500/A2000 to 2Mb and today, an accelerator card for the A500 which boosts its power by using an 020 chip and optional FPU. A similar card is also available for the A600 owner.

Power also brought the ability to use High Density floppy disks to the mass Amiga market when they released their competitively priced 1.76xl external disk drive. Owners of Amigas other than the A4000 could look forward to the joys of 1.76Mb on a FastFileSystem formatted HD floppy.

Another home-grown and popular product has been the Power hand scanner. Initially a greyscale device of limited colour resolution, the Power Scan has been developed into an award winning 24-bit colour unit with very versatile image processing software to accompany it.

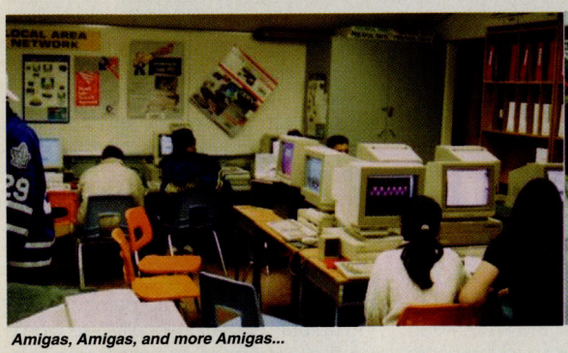




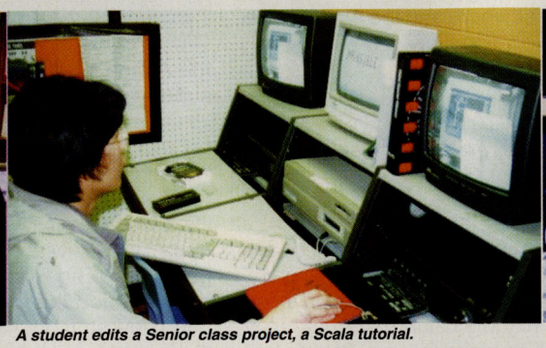
As well as their own products Power sell the successful Jaz and Zip drives.

It's an AMIGA World

Steve Bowie goes back to school before voyaging to the bottom of the sea to see how Amigas are working the real world.



Amigas, Amigas, and more Amigas...



A student edits a Senior class project, a Scala tutorial.



Even the sound facility conceals Amiga technology.

The Amiga lends itself to nearly any task, often at a much lower cost than alternatives. Despite recent corporate history, we still hear wonderful anecdotes from Amiga users all around the globe. Here are two we thought you would enjoy.

Reading, Writing, and Radical

Stephen Leacock C.I. is a secondary school in Canada's Toronto Scarborough region. The 1200 plus students seem a pretty average lot of teenagers, and the building itself is unremarkable. A student led me through a rabbit warren of halls and stairwells to the Collegiates' Broadcast Centre. There I met Howard Gross, head of Leacock's broadcast programme. Starting from zero in 1980 he has put together an astonishing facility with the Amiga as a key ingredient.

In North American schools the Apple Macintosh has long held the 'pole' position. Of late it has ceded ground to the IBM 'clone' platforms more common in the business world. The Amiga's main penetration in this important market has been in multimedia and video. There, its price-performance advantage has often won the day. Still, it's rare to encounter such a successful and rich Amiga environment as that found at Stephen Leacock.

Class Multimedia

The 'infiltration' of more than 15 years has added more and more nooks and crannies to the popular curriculum. Door after door exposed clutches of students hunched over monitors, tape decks, scanners, and mixers, not to mention a fully fledged control room and studio.

The sheer quantity of Amiga workstations is amazing. It's an Amiga heaven!

Gross explained that students begin in Grade 9 take quickly to the grounding in basic electronics and desktop publishing (using ProPage and ProDraw on Amigas, and Claris Works on 'Macs'). As time goes on, fundamentals of the Amiga are imparted in a 'hands on' way. Deluxe Paint serves in large measure as a tutor. Amiga created artwork and scanned materials combine with story board theory, leading in turn to the use of the multimedia authoring package AmigaVision.

Students soon know enough to decide for themselves whether to specialize in multimedia or broadcast streams. At the time of my visit there were roughly 120 young people in each. Whichever they choose, they won't likely stray far from that wonderful Amiga program Scala. This, and its high-end sibling Info Channel, is absolutely everywhere at Leacock. It's used for multimedia authoring as well as titling and animation. Student productions are fed to the many monitors linked to the closed circuit TV network throughout the school. Audio follows (or in the case of animation, leads) video, and extensive sound capabilities are provided for student use, including Audio Master as well as the world class AD516 Amiga sound edit card.

Amiga Heaven

Since this is an NTSC video standard facility, students in the four television classes are greatly assisted by the use of an A4000 with a complete NewTek 'Flyer' non-linear video edit system. The Flyer is complemented by three other Toaster systems. Lightwave is a favourite of some of the students, and 3D animations are found in various forms throughout their presentations.

The sheer quantity of Amiga workstations is amazing. It's an Amiga heaven! Leacock boasts four A4000s, three A3000s, five A2500s, around thirty-five A2000s (four being fitted with '040s), not to mention the odd CDTV. Budgets being what they are nowadays, Gross is fortunate to have well developed scrounging skills. He plies 'corporate partners' to get new, used, and supposedly obsolete equipment, and has bought, begged, and... let's just say that a good deal of resourcefulness has been applied! Unfortunately Commodore Canada, which used to be located just up the street on Pharmacy Ave., is nothing but a fond memory these days.

One measure of the programs success is the number of its graduates who are now working in various related industries. Just one of the major Toronto TV stations now boasts around 30 ex-students. Gross has quit keeping track of the alumni found in places like the CBC, The Sports Network, cable TV companies and even American networks.

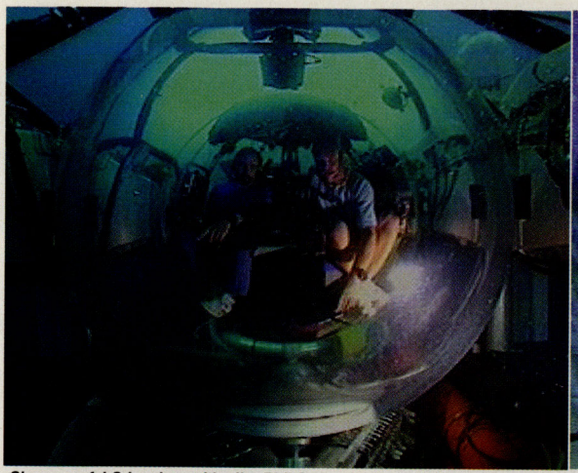
The Amiga should continue to play a major role at Stephen Leacock C.I. for many years. Aggressive marketing by competitors is beginning to make inroads. It's almost funny to see that the competition is no less worthy a protagonist than Silicon Graphics... funnier still to note the physical resemblance of SGI's new 'low end' machines to the hapless Amiga 'Walker' shown last year by AT! We hope that 1997 will see a new owner of Amiga Technologies who will make up for lost time, so that toeholds like this one at Stephen Leacock C.I. will not be lost.

Amiga Passages

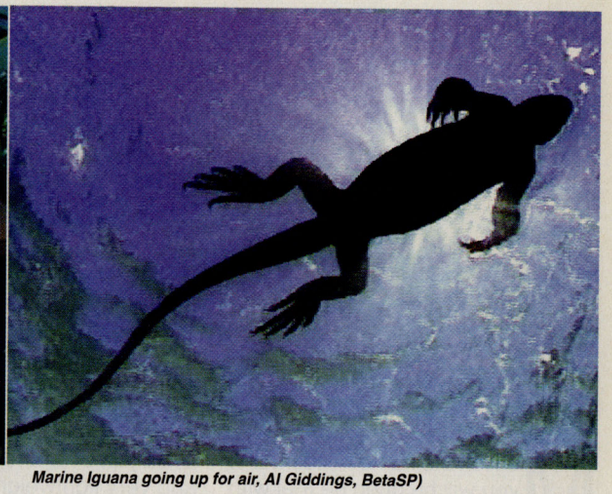
Biologists worldwide fantasise about a pilgrimage to the Galapagos Islands. Already renowned in Darwin's day, this remote South Pacific archipelago abounds in natur-

al wonders. Seabirds, vegetation, never before seen aquatic creatures, even fossilized species are subjects of intense scientific interest. The Ecuadorian authorities who are responsible for protecting this priceless resource impose extremely rigid requirements on research expeditions. Recently, an Amiga A3000 contributed to just such a voyage of discovery.

Fort Pierce Florida, USA is home to the Harbor Branch Oceanographic Institute. Various HBOI departments study marine biology, biomedicine, aquaculture and other related disciplines. In 1996 one of HBOI's research vessels, the R/V Seward Johnson carried its crew, a plethora of renowned PhDs and a 13 ton submersible vehicle (the Johnson-Sea-Link1) to the Galapagos for a month long stay. The expedition was extremely well equipped, with highly specialized equipment suited to the task.



Close-up of J-S-L spherewith pilot Phil Santos (left) and Pilot-in-Training Charlie Ridler (right), (Al Giddings, BetaSP).



Marine Iguana going up for air, Al Giddings, BetaSP)

Discovery

In addition the submersible's own cameras, a Sony VX-1000 digital camcorder made the trip for above-surface work. There was also the arrival of a video crew from The Discovery Channel, led by producer Dave Clark. Arrangements had been made to produce a 2 hour documentary special - Galapagos: Beyond Darwin.

This was to be no 'home video'. Famous underwater videographer Al Giddings, who is responsible for dramatic underwater footage in the recent Titanic documentary, as well as feature films like 'The Deep', 'The Abyss', and several of the '007' films, was part of the Discovery team.

The Discovery Channel also supplied a writer to post daily reports to their World Wide Web site, via a satellite link. For graphic purposes he carried a digital still camera, and an Apple Powerbook. Speedy transmission of information was more than a luxury. Data and images from the expedition could also be sent to distant sites for examination by other specialists.

Amiga Gear

Also onboard was Dan Boggess, 'Sub Technician - Electronics', and fellow Amigan. There is no truth to the rumour that the vessel's speed lost 5 knots due to the weight of Dan Boggess' gear! Not to be outdone by all the 'flash toys' around him, he had upgraded his A3000 to WB 3.1, installed a Warp Engine '040 accelerator, and brought his system up to 32Mb of RAM. Also tucked into a Zorro slot was a VLab Motion non-linear video system. An external SCSI tower case held a CD-ROM drive, two 520Mb hard drives, and a Syquest 200Mb drive for backups. This external case was plugged into the A3000's native SCSI bus. The original 52Mb drive (a monster when the A3000 was a hot new item!) and a 1Gb drive were in the A3000 case, hooked to the accelerator's SCSI-2 bus.

These 'renovations' were made just before the sub's operating season started in April. It was now November, and Dan Boggess had been home a total of 22 days in between. He said: "I had staked out a small corner of our video suite for my Amiga. Every now and then when I had a free half hour, I'd power it up and start rendering some animations with Imagine. I'd already set up the staging files and just let the machine take its time making the pretty pictures. I used ADPro , with FRED and Pro Control, to batch process the Imagine JPEG frames for import into Movie Shop. So, I could just sit down for 10 minutes to get everything started and walk away until I had time to come back to it. The Amiga would hum away happily".

Imagine That

Dan Boggess used Imagine to preview different lighting arrangements for the sub. An additional bank of 4 HMI (metal halide) lights had recently been added to the sub's standard suite of lights.

The digital still camera was proving to be a source of frustration. The image quality was disappointing, showing obvious signs of low resolution and poor colour. "The little digital camera just wasn't making it. It hurt my eyes and sense of pride to let those images go out". He tried doing some image processing in ADPro, moving the files back and forth with the CrossMac from Consultron. Still, the digital camera provided limited opportunities to select a 'best shot' for the expensive satellite transmission. Since there was no shortage of first class video available on the vessel, Dan soon made other arrangements 'of the Amiga kind'.

He had upgraded his A3000 to WB 3.1, installed a Warp Engine '040 accelerator, and brought his system up to 32Mb of RAM.

Amiga Rescue

The VLab Motion System allowed a quantum leap in image quality. Very little time was available to grab and process the images. The ability to grab a sequence and later pick the best frame was critical. Al Giddings would view his BetaSP master tapes once, the guy with the Sony DV camcorder had other things to do, and the writer had a deadline for his uploads. Besides this, leaving the playback deck in pause while framegrabbing could quickly ruin irreplaceable footage.

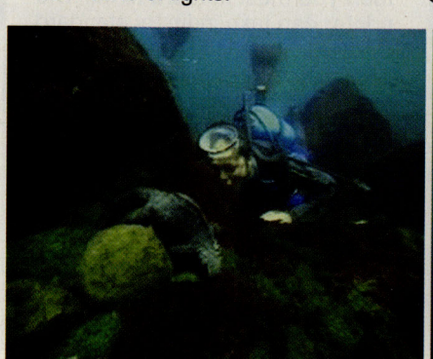
Dan Boggess started grabbing 1-2 minute clips from all available sources for Discovery Online, saving the choicest frames as JPEGs. Satellite time is quite expensive, and the shots were destined for a Web site where small file sizes are best. He used ADPro to batch convert files to 320x240 pixel, 256 colour images. The resulting 9k~11k files were put on a Mac formatted floppy, then taken to the ship's bridge, plugged into the satcom terminal, and a mere 30 minutes later the story and pictures were in Discovery's hands.

"We were able to send out six beautiful shots instead of two lousy ones every day. The people back at Discovery were thrilled. They hadn't expected any underwater scenes, and certainly hadn't expected the quality we got using video through the VLab".

The Harbor Branch and Discovery Online sites (http://www.hboi.edu - follow the 'Media link') are worth visiting. The Discovery site holds a 'clickable' image map which allows you to trace the chronicles of the month long expedition. The daily accounts and accompanying images are captivating.

Dan Boggess wanted to point out that among the images included in the daily journal entries, the few that are 'blocky looking and over-saturated' are those from the Apple QuickCam.... like I said, Dan Boggess is an Amigan.

*(**AUI** is grateful for the images courteously supplied to us for this article by members of the Harbor Branch Oceanographic Institute, as well as Al Giddings and The Discovery Channel).* ***AUI***





From left to right: Marine iguana grazing on algae with Dr. John McCosker sharing the experience, (Al Giddings, BetaSP). Johnson-Sea-Link I in mid-water. The halogen lights around the video camera look yellow to a sunlight white-balanced camera, (Giddings, BetaSP).

Kyo Who?

John Russell test drives an LED printer from a manufacturer who should be better known by Amiga users.

Mention the name Kyocera and you will be often be met with a blank look and a "Kyo who?" in response. This is not surprising as Kyocera today mainly supply the heavy-duty end of the business laser printer market, leaving Hewlett-Packard, Canon, and Epson for the SoHo (Small office/Home office.) buyer to choose between.

Yet that was not always the case. Kyocera was one of the first laser printer manufacturers to have machines that could be successfully run by the early Amigas, something that cannot be said of Hewlett-Packard lasers until the advent of printer drivers that understood the European habit of using A4 paper. These didn't officially appear until the release of Workbench 2.0.

The smallest model in the current Kyocera range is the compact FS-400 LED printer. Instead of using a bulky and delicate laser engine to perform the electrophotography - the technique that allows images to be formed on plain paper by the transference of powdered 'toner', the machine relies a bank of micro-LEDs to draw electrostatically the graphics on the imaging drum.

This method uses less power and allows for a more compact machine. The FS-400's footprint... is just that... it is a just over a foot wide and long and very lightweight. At the back is the parallel interface connection and power socket for the detachable mains lead. The on/off switch is mounted on the right hand side of the unit, which makes for easy access.

The opposite end of the FS-400 slopes down to a curved front. Here is the window covering the alpha-numeric LCD, next to which is the control panel. Seven membrane keys control the functions of the printer, while the LCD informs you its status in easy to understand English words rather than esoteric error codes or combinations of flashing lights blinking out S.O.S.

It's about time Kyocera came to be a better known name in Amiga circles.

The printer defaults to the HP Laserjet III control language, but there are six others to choose from: basic line printer, several dot-matrix emulations, and the optional KPDL - Kyocera's own language to rival H-P's PCL and Epson's EscP2. Amiga software does not support this last language, so we chose to use the default setting. Both Studio, with its LaserDriver, and TurboPrint, with its HP_LasetjetIII, admirably ran the FS-400.



The Kyocera FS-400.

Straightforward text, using one of the printer's 13 internal fonts, was quickly outputted at 300x1200dpi, while fancy fonts - using the graphic printing methods used by Wordworth and Final Writer - took a little longer. Kyocera claim the FS-400 can manage 4 pages per minute. Like text, graphics have to be downloaded to the printer in one go, so the maximum size of the image on paper is going to be dependant on the memory within the printer.

The FS-400 is supplied with 1Mb of RAM on-board and this is sufficient to print a greyscale graphic that covers about two thirds of an A4 sheet of paper. If you want full A4, then you must fit more RAM. The printer can take industry standard SIMMs up to 4Mb in size, and these are fitted to the easily removable motherboard where you will also find the printer's brain is based on a Motorola 68000 chip. Hoorah!

The 100 sheet paper tray is pulled out from the front. Paper guides inside can be set for A4, A5, B5, Letter, or Legal paper. A flip-out guide on the lip of the paper tray ensures that manually fed sheets - which the printer can auto-detect - are aligned correctly. The printed sheets are ejected at the top of the unit, although there is an optional output tray that can be fitted to the rear.

Kyocera are very environmentally conscious and the FS-400 complies with the EPA Energy Star requirements by going to 'sleep' during periods of inactivity. This means that it takes a few seconds to warm up once you have sent a document to the sleeping printer. Also, the FS-400 is part of Kyocera's ECOSYS range, a cartridge-free technology which uses long-life components so that running costs are reduced. This printer is expected to output 100,000 sheets without the drum needing to be changed, so it should last a considerable time in the home environment.

Conclusion

The Kyocera FS-400 is an unobtrusive, quiet LED printer capable of handling the Amiga owner's printing needs. It works fine with the leading word-processors and graphics programs and the only fault we could find was a slight difficulty in sliding out the paper tray. Reduced running costs - a toner cartridge is supposed to manage 1,500 pages at 5% coverage for an RRP of £15.95, that's a lot cheaper than a cartridge for an inkjet these days - should mean smiles all round.

It's about time Kyocera came to be a better known name in Amiga circles. ***AUI***

INFO

Kyocera FS-400

Rating: 92%

PRICE

£439 + VAT

CONTACT

Kyocera Electronics (UK) Ltd.
8 Beacontree Plaza
Gillette Way
Reading
RG2 0BS
Tel. 0118 931 1500



The Amiga's leading printer control programs give you the ability to change many attributes of the printed image, such as dither pattern and gamma correction.

CINEMA FORCES

HiSoft SYSTEMS

NEW LOW PRICES

NEW	IBrowse V1.10 (with frame support)	£29.95
	Net&Web	£39.95
	Net&Web 2	£69.95
	Termite	£39.95
	TermiteTCP	£39.95
NEW	Web Explosion 2CD	£49.95
	Studio II Professional	£49.95
NEW	DiskMAGIC 2	£39.95
	MaxonMAGIC	£29.95
NEW	MediaMAGIC	£49.95
	Upper Disk Tools	£14.95
NEW	HiSoft C++	£169.95
NEW	HiSoft C++ Lite	£79.95
	Devpac 3	£49.95
	HighSpeed Pascal	£79.95
	HiSoft BASIC 2	£49.95
	Gamesmith	£79.95
NEW	Twist 3 Database	£99.95
	ProFlight Simulator	£19.95
	Aura 8	£34.95
	Aura 16	£99.95
	Clarity 16	£129.95
	ProMidi Interface	£24.95
	Megalosound	£34.95
	VideoMaster	£69.95
	VideoMaster RGB	£109.95
	VideoMaster AGA	£79.95
	VideoMaster AGA RGB	£129.95
	ColourMaster	£69.95
	Zip Drive (inc all extras)	£159.00
	Jaz Drive (cased)	£449.00
	SMD-100 MPEG decoder	£199.95
	Classic Squirrel	£69.95
	Surf Squirrel	£99.95
	2x CD-ROM Drive (cased)	£89.95
	4x CD-ROM Drive (cased)	£129.95
	12x CD-ROM Drive (cased)	£229.95

SPECIAL OFFER

SAVE £20 ON THE PRICE OF ANY SQUIRREL WHEN YOU ORDER A ZIP OR CD-ROM DRIVE

ALL MAJOR CREDIT CARDS ACCEPTED

POSTAGE £2, COURIER £4 (NEXT DAY £6)
(ZIP, JAZ, SMD-100 & CD-ROM DRIVES BY COURIER ONLY)

HiSoft Systems
The Old School
Greenfield
Bedford MK45 5DE

Phone 01525 718181
Fax 01525 713716
Email sales@hisoft.co.uk

© 1997 HiSoft Systems. E&OE

CINEMA4D

AMIGA GOLD FORMAT

IT WILL RENDER YOU SPEECHLESS

Professional Raytracing and Animation

NEW V3 OUT NOW!

Call us FREE on 0500 223 660 and ask for your FREE Cinema4D demo disk... or download it FREE from www.hisoft.co.uk

£199.95

UPGRADE FROM V2 £39.95

NEW CINEMAFONT

PLUG-IN POSTSCRIPT FONT SUPPORT FOR CINEMA 4D



Now you can use any Type 1 font with Cinema4D to add three-dimensional words to your pictures and animations

£39.95

NEW CINEMAWORLD

LANDSCAPE AND TERRAIN GENERATOR FOR CINEMA 4D



Create realistic landscapes, populate them with objects like trees and plants, or let your imagination run wild and build alien worlds...
and then use Cinema4D to animate spectacular fly-throughs!

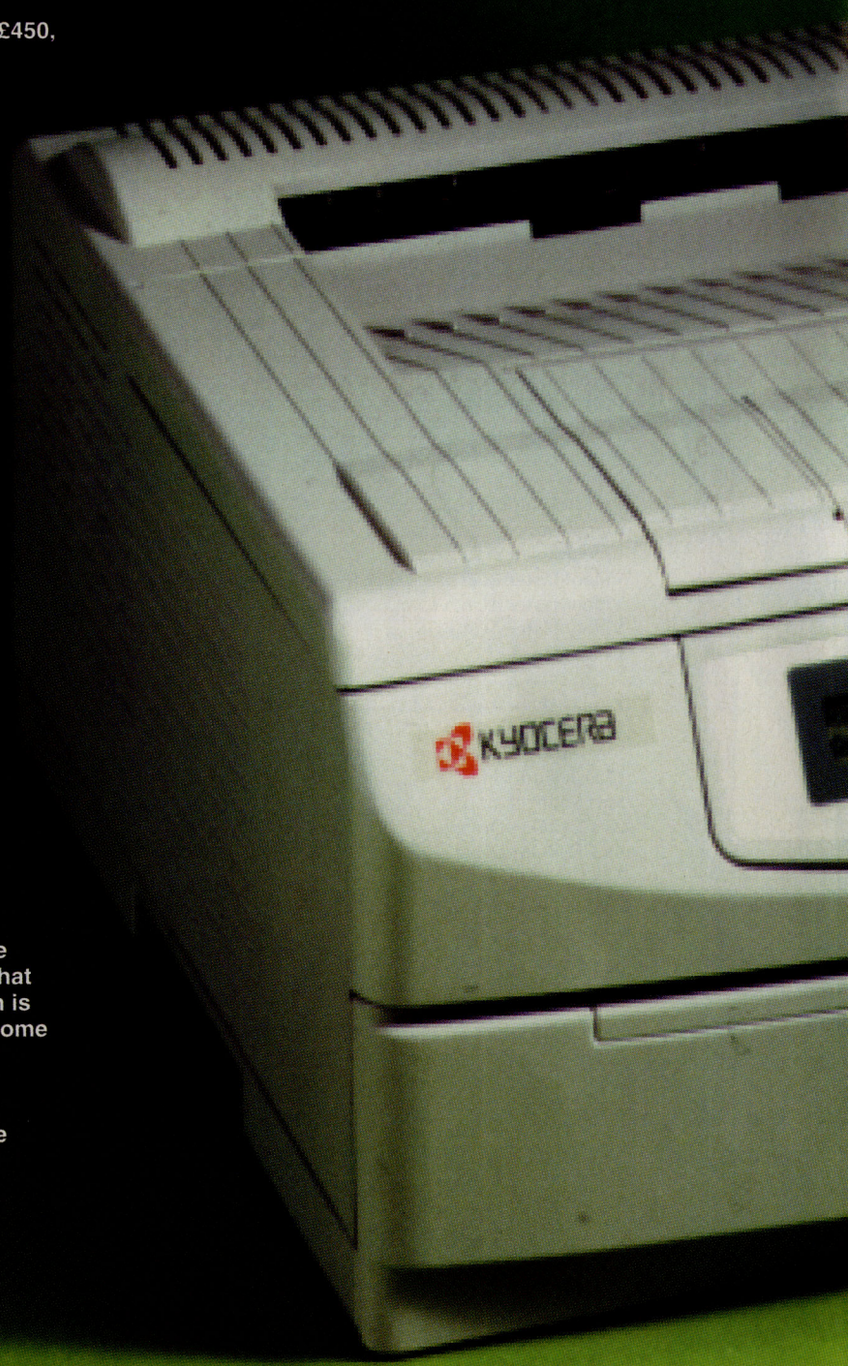
£39.95

HOT STUFF
CALL FOR OUR COMPETITIVE MODEM PRICES

CALL 0500 223 660 FREE

HiSoft Systems—Your Safe Passage Through The Jungle

Kyocera



Those extremely generous folks at Kyocera have kindly agreed to let *AUI* give away one of their amazing FS-400 LED printers. We think that for all round value this is the best printer that has ever appeared on the Amiga scene. This terrific little device, which retails at around £450, could be yours! How about that for a prospect!

All you have to do is find the largest number of words of three letters or more from the company's name. The words must be real words, checkable in the Shorter Oxford English Dictionary, and they must not be people's names.

Yes, find as many words of three letters or more from 'Kyocera' as you can and you could be the proud owner of this environmentally friendly 4ppm (pages per minute) printer. And, if you have worries about printer drivers, *AUI* will throw in a copy of IrseeSoft's TurboPrint 4.1 to get you going.

This could be the moment when you get into really professional style printing. If you want to know more about the printer look on page 44 where there is a full review of Kyocera's outstanding product.

Send your words listed alphabetically, and with the total number you have found, together with your name and address to:

The Outstanding *AUI* Kyocera Competition
Unit 2
Utopia Village
Chalcot Road
London NW1 8LX

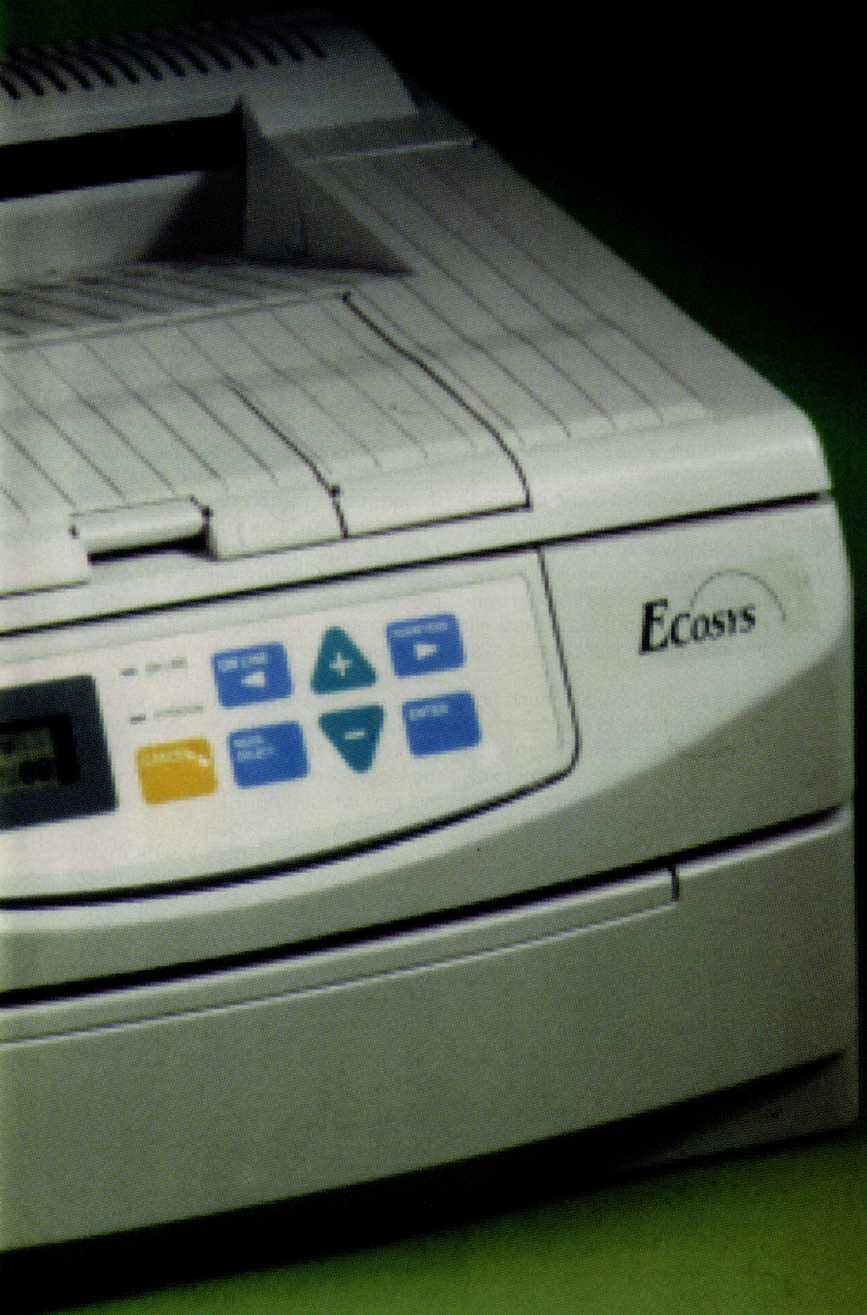
The entry with the most words will be deemed the winner. Words that begin with capital letters, i.e. proper nouns, are not allowed. In the case of a tie, an entry will be drawn at random to determine the winner.

The closing date for the competition is Monday, June 23rd. An auspicious date as it was on this day in 1872 that the typewriter was first patented. Sorry, the competition is open to UK readers only... unless you are prepared to come over to the UK to pick up the printer if you win it!

As usual, the Editor's decision is final and no correspondence will be entered into regarding the competition. The winner's name will be published in the August issue of *AUI*.

Good luck! And Happy Kyocera Printing!

Competition





Win!



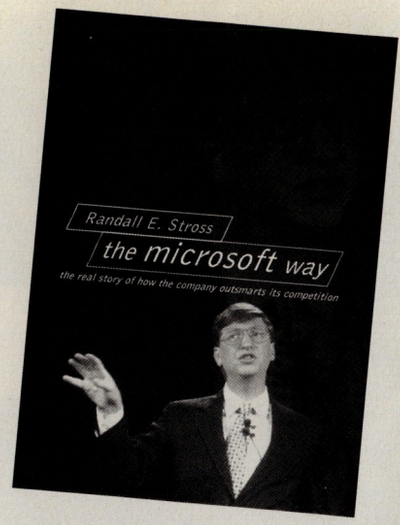
Win!



Win!

Get Smart, Stay Smart

Antony Jacobson reviews a book that seeks to reveal the secrets of the world's top software company.



The April 1996 issue of Wired Magazine in the USA supplied its readers with a tourist guide to the World Wide Web entitled "On Hating Microsoft". Every site listed was, as the author of this book points out, dedicated "to venting disgust, rage, and an assortment of other strong negative feelings about a certain software company and its chairman. A typical offering found on the Web at the "Bill Gates Fun page" provided visitors with a photograph of Gates... and an array of weapons - knife, Uzi machine gun, cannon - that could be directed at him with a click of the mouse."

That is one angle, the hate message, but Randall Stross, a historian and therefore willing to take a longer view of the phenomenon of Microsoft and the computing world in general, suggests that there are two: that we can accept the idea of Gates and Co. as devils incarnate, electronic Darth Vaders; Microsoft as the evil empire, its software as junk and the company's success rooted in deceptions, outright lies, legal trickery and brute force marketing. However, another view is, as Microsoft would and does maintain for itself, that it has benevolently ushered in the personal computer revolution and that its market success and the immense wealth it has brought to its founders are just rewards for the service it has rendered humanity. I think I know which of the two views would be largely supported by the Amiga community. I am not quite so sure of the response one would get if the more general public were questioned.

Not Oz

The author had previously written a book about the business adventures Apple's co-founder Steve Jobs - see this month's NewsFile - after he left Apple. He says that when he looked "behind the curtain" Jobs' "brilliance" evaporated like the Wizard of Oz. The tone of this book, though by no means adulatory, clearly shows that when he drew back the curtain on Microsoft - and it would appear that he had total freedom and a "No Escort Required" badge to help him - that same evaporation of magic did not happen.

Perhaps one of the reasons could be that he seems not to have achieved a personal interview with Bill Gates, though he quotes extensively from the writings and reported speeches and meetings of this Guru of Electronics. If he had had personal exposure to Gates, he might have come out with a different opinion - even a more admiring one.

What does emerge from this book though is that there are genuine reasons for the success that Microsoft has built and it hasn't been just luck and villainy. And the major reason has been the extraordinary ability of Gates and those closest to him to recruit really bright young people, mostly men, and to have given them what would have been in almost all other companies an amazing amount of freedom and respect. These, the real smarts, have repaid Microsoft by making almost ceaseless advances toward leadership in every aspect of computing into which they have driven the company.

There are genuine reasons for the success that Microsoft has built and it hasn't been just luck and villainy.

Rear View Mirror

Henry Ford, the car maker, was famous for his contempt for the studying of the past. "History is more or less bunk", he said. This attitude is vital if you are going to shift the position of your world. Gates, often compared to Ford, is also described as being impatient with "looking in the rear view mirror", the phrase that he and others use dismissively. He says "It's a waste of time. The future is what matters."

Yet that is not entirely true, for in his speeches and writings, Gates is constantly citing historical examples when he discusses future strategy.

He appears, from what is in this book, not to be aware of this contradiction. Perhaps the main reason for this is that while he clearly has a historical perspective, the future of the organisation he heads and its ability to influence its own special field is what preoccupies him above all else. That preoccupation blocks out a great deal of other input that might affect his judgements and occasionally leaves him looking somewhat lacking in ideas. For example, when he is asked to comment on what effect the spread of personal computers has had on the world and what it might do in the future, he comes up with some pretty banal, unimaginative responses. It will be a great information provider... it will enable the PC to replace the TV. It will free us from menial jobs... (Could he mean Steve?).

Standards

According to the author though, there are areas where Microsoft has excelled and so conquered. At the beginning it was the cleverness of Gates' small company, just a dozen or so employees, outwitting the giant IBM and getting them to take the DOS system on the most advantageous terms - for Microsoft. That was early on. However, the major point of departure for Microsoft's success was Gates' understanding of the need for standards that many computer manufacturers would adopt so that software could run on machines produced by disparate companies - a feat that seemed impossible in the anarchic situation of the 1970s.

In a column Gates's wrote for a computer magazine in 1977, he lamented that personal computer manufacturers had not agreed a single operating system which could save software developers from having to create different flavours for different vendors. Four years later, Gates led his company into creating just such a system.

What he seemed to understand better than anyone else in the business was what has been called Microsoft's three principles: volume, volume, volume. That means the sales of any piece of software has to be in millions. And how could that be done? By cutting the price and getting it out quickly. Sometimes that meant putting out beta versions of a software package in a very bugged condition. This was so common for Microsoft that Gates even commented in 1990 - well before the launch of the infamously bugged Windows '95 - that if the company did not change, customers would simply skip the first two versions that they brought out.

Feedback

One way that Microsoft overcame that problem was "feedback". What Microsoft meant by feedback was that they tracked and apparently genuinely listened to and learned from all the comments, complaints and compliments that they received, either internally from employees or externally from the customers.

For example, the Technical Support Department was used as a valuable source of information with feedback being passed to Microsoft's developers. Each group of developers was "charged" internally for the cost of the time used by the support staff in handling the phone calls about the problems with that group's products. The fewer calls received, the higher "profits" - and hence bonuses.

However, when you look at the immense success that Microsoft has achieved, it is clear that while no one aspect of its business can be given the credit for that success, there are some stand outs. All of its stratagems, from cutting prices to previously unthought of levels to marketing coups, such as buying up and giving away free a million Microsoft advertising packed "Times" newspapers the launch day of Windows '95, show something in common - daring and imagination. Those are qualities which come from an organisation that bases itself on the brightest staff it can recruit. Every employee is encouraged to recommend other potential "hires". Each employee is urged to find within themselves the answers to unusual challenges.

One typical example was a young man, even younger than Gates some years ago, who rapidly rose through the levels of management through writing and circulating memos with titles like "Totally Insane Ideas".

Amiga users may not think much of Microsoft's products, but with so much of our world afraid to step outside the conventional, whatever one thinks of many of the ways that Microsoft has achieved its success and however obscene one might think the accumulation of wealth that Gates has made, any company that rewards an employee by promoting him to Vice President for writing memos called "Totally Insane Ideas", I think merits a considerable amount of respect. ***AUI***

INFO

The Microsoft Way
Randall E. Stross
Little, Brown and Company
£18.99
ISBN 0 316 88318 2



This TechnoWorld

50 **Anthony Mael and Martin Witton explore the technotruth out there.**

56 **Anthony Mael splashes back into the flooding stream of bits they call the Internet.**

48 **Simon Goodwin explains, in the final article of the series, some near-misses of the past and makes predictions for the future of the microprocessor.**



This TechnoWorld... AUI - *Boldly going where no Amiga magazine has gone before.*

Technology Today

Anthony Mael and Martin Witton explore the technotruth out there.

Not Learning Much

According to research carried out by The Learning Company, an organisation that creates and sells CD-ROMs, 75% of the CDs sold in the UK were games. Education took just 7.7%, and reference titles managed 7.5%.

CD-ROMs were first introduced as a way of storing masses of reference material, but this hugely available storage medium looks to have had its biggest success in the most childish of its forms.

Does it not seem odd that technology, the product of intelligent minds creating elegant and sophisticated solutions, should be driven to find its most success at the level of toys or their substitutes - screen-based games?

Play It Again, Sony

Though many Amiga users may feel that technology deserves a better fate than just being exploited for mindless-style shoot-'em-ups and other intellectually-challenged pastimes there are, we assure you, many grown, if not especially mature people, generally men, whose business of life is the business of electronic games. Some of them might well be the dealers who sold you your original Amigas.

Now it would be hard to find an Amiga in these shops. What you would encounter would be plenty of Sony Playstations and, if you were lucky - or some might say unlucky, the latest plaything to arrive on the UK and world scene, the Nintendo64 games console.

This addition to the world's cultural pursuits has not, it seems, been produced in sufficient numbers to satisfy the pent up demand that is thought to have been created by the long wait for it. The Nintendo console was launched in Japan and the USA last year with some considerable success. Though Sony claim that their earlier launched 32-bit machine still has sold more than their rival console which lays claim, as its name suggests, double the number of bits.

What is interesting is that Sony, who had already seen off the even earlier launched Sega Saturn, especially in the UK - where they are said to be selling 23 machines for every Sega finding a home - and other European markets, were clearly made to feel insecure by the coming Nintendo and a few days before the 64-bit monster appeared on the scene, cut their price viciously for the Playstation from £199 to an astonishing for the computer trade, £129.

By anyone's terms that's an enormous cut and it set the computerised cat among the console pigeons for retailers who had been assuming that the Nintendo would take the market.



Sony expects the Playstation to remain market leader now that it has cut the price.

Nintendo managers pouted that, as the price of the Playstation was now just about half of the Nintendo, it equalled the "bits" and the value of the two competitors.

Not content with hitting Nintendo where it hurt with hardware price cuts, Sony also encouraged buyers of software with the launch of range of games at a mere £19.99. When you consider that even the few games available for the N64 are priced somewhere up to £70, that too was a master move in this cut-throat game that is being called "The SuperConsole Wars" in an echo of the battles that took place not so many years ago between Sega and Nintendo.

Nevertheless, the first 20,000 batch of Nintendo console that arrived in UK computer stores are reported to have been rushed out the doors by 10 a.m. on the same day of arrival. Nintendo, you can be sure, are galloping in as soon as they can build up extra supplies to take advantage of the aforementioned pent up demand.

However, retailers who see the furore caused by the "war" as a 'Damned Good Thing' after years of depressing lack of sales - possibly since the boom years of the Amiga - are assessing the Sony price cut as a certain way of stimulating their eager market. They are saying that Sony may well, at these price levels, achieve their sales target for Europe in 1997 of 2.7 million, 800,000 of which are aimed at the UK.

They would probably even sell more than that figure if the UK price were to be that which Sony is charging in the USA, which is a market-pleasing $149. In sterling that comes to a £99 price tag.

When you think that it costs - or has cost even recently - at least that to manufacture the bare bones of an Amiga A1200, you can see the task of any company trying to bring back the Amiga as a mass market computer - which really means as a games machine - is, whether we like it or not, now impossible. At the other end of the scale, the PC has such a real mass market, but not only as

a games machine plus such a trememdous software backing that the Amiga seems disastrously squeezed, possibly to death, between the two extremes.

Adding On

The growth of the PC market over the past few years has been treated as some kind of depressing failure even though other industries would have greeted it as a huge success. If the car industry, for example, were to have predicted a growth of 15%, as has the PC business, it would be cracking the cases of Moet and Chandon all the way to the bank. Yet most people in the PC industry seem to have regarded the prediction without real enthusiasm. They have been used to better or bigger things.

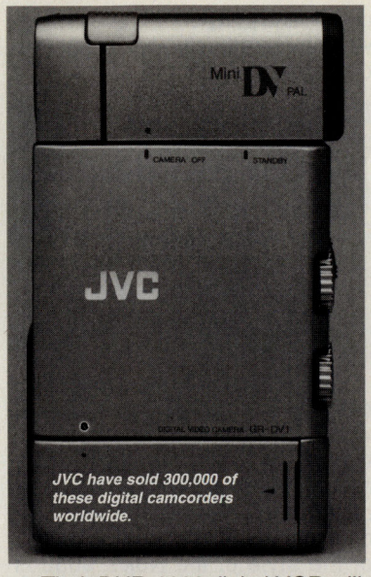
On the other hand the camera and the camcorder businesses have been suffering pretty uneventful years since computers appeared on the high street market. Now these manufacturers are attempting to fight back by linking their products into the PC. They are unashamedly aiming their products at the mass market buyers as well as the early adopters. The products that they see as most likely to find an electronic welcome are digitally charged peripherals with prices that range between £200 and £1500.

The latest in this digital add-on business is from Toshiba. It is a still camera, the PDR-2A, which is claimed to mark a first in industrial design. The rear portion of the camera has a built-in PC card that slips into notebook computer's card slot and enables the downloading of stored images without the need for a cable.

The unit is said to offer the simplicity of a point and shoot camera and captures the data using a Flash memory card. The camera weighs about 200g and is claimed to capture images in 24-bit colour.

Digital VCR

Not content with stirring up aggression on the console front, Sony are intent on getting into the action in other electronic markets too. They are saying that they are shortly going to bring out a domestic digital video recorder. As we all know, those invaders of the home scene, the VCRs - which apparently nobody over the age of 8 can program - have until now been analogue. Digital VCRs have, say Sony, been just too expensive for mass marketing. Yet now they believe that they have a digital VCR that will break that barrier.



JVC have sold 300,000 of these digital camcorders worldwide.

Their DHR-1000 digital VCR will, they have convinced themselves, appeal to the home-theatre enthusiast. We say "convinced themselves" because the price that they think will have this appeal is a mere $4,199 - which we reckon to be some £2600. Now if that's what these "enthusiasts" are paying, we don't know many of them.

There are aspects of this pricey machine that do appeal. Sony say that instead of the normal 280 lines of resolution that are found on the analogue VHS VCR, the DVCR has 500 lines. Sony have admitted that they have delayed selling it in the USA, which they think is probably going to be their biggest market been, because of concerns about copyright protection of the videos played on the recorder. This has not stopped them marketing it in Europe though.

To accompany the deck, Sony say that digital format cassettes are to be sold at about £22. JVC are also interested in the digital field. They say that their first digital video camcorder has sold 300,000 worldwide. They also intend to bring out a digital printer that can receive bitmap files directly from a VCR or camcorder and then print them.

Cursing Away

In the hope of helping Amiga users, and readers of ***AUI***, get to know where the increasingly difficult to find Amiga products could be bought, we suggested to Anglo Corporation, the owners of the resuscitated SDL aka Silica, that if they would supply us with a list of the Amiga stuff that roosted on their shelves, we would print the list in ***AUI***. It would be, as we have had in the past, a form of buyers' guide and useful both to readers and to Silica.

We are public-spirited folk here at ***AUI***, but we are not saints. So when we had repeated the request a number of times and never even received the courtesy of a reply, we let the matter fall back into the limbo of forgotten things.

Now the Amiga may be down, but in curse power, don't knock it, buster! It still, apparently, has the bite of the scorpion's tail. We are always sad when we have to report a death, and now it's Anglo's turn to bite the dust, perhaps for having ignored the help the Amiga and they could have done with.

Security guards and crying staff stood outside the Woking-based group after the administrators were called in when Anglo went down with debts of over £5 million. It collapsed taking down SDL, the one-time Amiga distributor; Silica, the retail arm; and TechnoPlus, which had supplied such goods as Amiga joysticks.

It had employed some 300 staff and its CEO was a supposed deep-pocketed newcomer to the mass computer market world, David Gosling, son of the Croesusly rich founder of the National Car Parks empire. The irony is that the SDL group had gone down before, blaming the fall of Commodore and the Amiga, and had then been "rescued" by Anglo. According to one industry source, the cause of the trouble was the hubris of the new management in grabbing twenty or so ex-Escom high street outlets.

"They lashed out on Escom sites and underestimated the costs of kitting them out. December and January were bad and they had all this kit and no dosh."

It's certainly a funny old place, this technoworld. They come and they go, these technology companies. Yet we think that they ignore the Amiga Curse at their peril. A curse may not be very technological and may even sound out of place in this kind of world, but none of us can avoid the results of our own foolishness. The Amiga probably does no more than reflect ourselves back to us like an unpleasantly distorting mirror.

Chipping Away 2

Stealing a headline from the NewsFile... Pilfering employees are said to be the most active of thieves of memory chips, according to a recent survey.

The collapse in memory prices has led to a slump in black market thieving, because professional criminals now find the risks outweigh the rewards, according to a report from Infosecurity. The problem, according to the report, is that staff are tempted - not to make money - but to upgrade their home machines over the weekend so that they can surf the Net or play games which need beefier computers than they currently own.

The report claims that theft is being discovered when computers which were running perfectly well on Fridays are, by Monday, possessing only sufficient memory to boot up and run the operating systems and no other software.

The reason that professional crooks stepped out of the market and left it to the amateurs, according to Infosecurity, was that the price of 4Mb of memory fell, during 1996, from £160 to £24.

Wizard Machine

You will soon, if manufacturers plans go aright, be able to see 'The Wizard of Oz' on DVD. The eternally favourite Judy Garland movie is apparently to be one of the first to be released in the DVD format. Five film studios, Columbia/TriStar, MGM, New Line, Polygram, and Warner are planning to release movies in the format within the next few months. Warner alone are claiming that they will be bringing out 25 titles.

Sony and Blockbuster are hoping to lessen confusion between VHS and DVD by having an "education" campaign to coincide with the launch by Sony of DVP-7000, an £800 high-end DVD player that includes a separate CD drive.

For computer users, the arrival of DVD-ROM will not come so quickly, with the autumn being predicted as the time when many companies will bring out machines.

Nodding Off

The BBC today is not just big in radio and TV, but makes millions out

SILICA

of selling its products all over the world. That is, sometimes it sells its products while at other times someone else sells its products... Without even asking permission.

You can imagine top BBCers shock at seeing Noddy on CD-ROM selling like hot rice cakes all over South East Asia when they hadn't even released it there. That is, naturally, no bar to the wide boys in the pirating business in those parts. They had reproduced Noddy and other BBC programme hits like Wallace & Gromit and Mastermind and in Malaysia they were selling off market stalls at a mere eight rinngit - that's about £2.50 each. No wonder Asian kids are getting all they Noddy-well need.

Even more annoying for the Beeb is the news that not only can these discs be bought, but it is said they are even being rented out! At that price retail, renters will clean up and the BBC will reasonably think they are being done the dirty on.

Goodbye, Laserdisc

According to reports from the USA, the sales of Laserdisc systems fell by 40% in 1996. However, the machines which most of us might have thought were already long dead still managed to shift nearly 150,000 units in the year. That's quite astonishing when according to the Electronics Industries Association, who supplied the statistics, most people are waiting for the DVD wave to break over them.

Who are these Rip van Winkels still buying Laserdisc hardware, and where have they been hiding for the last five years?

Smart Language

Though you may not have heard of them, there are two companies which dominate the world's smart card industry. They are the excitingly-named Schlumberger and Gemplus. One of the problems until recently was that their smartcards didn't speak the same computer language. Now, however, comprehension is on the way. For the two smartcarders have agreed on a single language to use on the smartcards they create. It is to be Java, the programming language which is widely used on the Net.

Smartcards are increasingly used for electronic commerce and other applications such as identity verification and delivery of governmental services such as social security benefits. It is estimated that in 1996 two hundred million smartcards were issued. That figure is expected to grow to one billion within five years.

The agreement between the two companies, which are reputed to have 70% of the market, is thought to be likely to enable the smartcard market to expand even more quickly still.

Heading Our Way - Maybe

One of the most interesting ideas to be proposed recently in technology is to suggest that cathode ray tubes are unnecessary. Not a revolutionary idea? No, it is not, but the continuation of the suggestion is that the problem of the CRT is that it fires electrons from an electron gun onto a phosphor screen which, in turn, produces the photons we see, an inefficient process energywise. It is something we are well used to with television.

If we are likely to be moving, literally, into more mobile communications - the mobile phone is one example that has already been widely accepted - then we have to conserve power, and that power is used somewhat extravagantly in present day display systems.

Dixons acknowledged the cable splitter was faulty, but disputed the interim payment of £20,000 awarded to Wood by the Court.

The estimated power use of forthcoming mobile communications, which use integrated circuits with optimised functions and are driven by a radio transmitter, is half a watt. A reasonable power requirement for a combined computer communicator of the style of the Nokia 9000 is around two and a half watts, but if we could have a head mounted display, it might need only a quarter of a watt.

The way that this could be achieved is by doing away with the screen. The idea is that the retina of the eye would be directly illuminated by mounting a low-power laser on a frame of some lightweight spectacles. This would provide a "head-up" display and could be easily combined with an ear-mounted audio device.

The whole apparatus doesn't have to be highly complex and would eliminate the need for the heavy power required to run the conventional devices of today.

The use of such simple, but as yet undeveloped, devices might include the ability to receive television transmissions, especially those coming via satellite. Another useful service would the ability to tune in to the also satellite-based GPS - global positioning system. That would mean that we could instantly have the information on our position anywhere in the globe beamed directly to our eyes - and presumably to our brains. We say presumably because it has been our unfortunate lot only to have relationships with two women who have been able to find their way around a map while we were doing the driving. One other - an ex-spouse - came up with the immortal phrase during a heated roadway discussion "The map is wrong and we are not here!" With her it would not have mattered how powerful the head-up system was, the brain had been left behind.



The power requirements of mobile computing and telephony will be reduced in the next century.

Power to The People 2

We are always being urged to save power, so we see no reason why we shouldn't save brain power by using the same headline more than once in this ***AUI***. And it is always power that limits our use of technology. Electric cars are arriving on the roads, but their problem is the weight and weakness of the batteries required to keep them moving on there.

However, there is one source of power that should be available to all of us, but presently is not accessible in a usable form. That is the power generated by our bodies, or rather the movements of our bodies. We produce kinetic energy when we walk, swinging our arms and legs. It has been estimated that a reasonably vigorous walk would produce two watts. What we would need would be a way of storing the energy for use in, say, air-conditioned clothes, keeping us cool when it is warm and heating us up when the chilly breezes blow.

An even more interesting use of such personally generated energy would be to power the computing or communications technologies we want. It could be done by avoiding

the one place, wrist or other position, and distributing the technology over the surface of, say, a shirt or vest. Torso heat to power is an idea yet to be exploited, but seems a reasonable bet for the next century.

£1.5 Million for £6

An irate customer recently sued Dixons, the high street electrical chain, for £1.5 million as it had sold him a cable for £6 that did not work. London-based computer consultant Richard Wood claimed that the faulty cable caused his business system to collapse. Dixons acknowledged the cable splitter was faulty, but disputed the interim payment of £20,000 awarded to Wood by the Court. When Dixons continued to refuse to pay, they had a visit at their head office from the bailiffs.

More Digital TV

One of the difficulties for digital terrestrial television is that while satellite TV can offer hundreds of channels, terrestrial can offer only thirty. Using a land-based transmitter, digital terrestrial TV will be unable to compete.

However, a US high technology company is claiming that they can save the situation for the terrestrials. They have created some software that is being promoted as being able to more than treble the number of channels than can be broadcast. The company, Imedia, says that multiplexes - blocks of frequencies - would be allowed, with the new software, each to be used for 14 or 15 channels of sport, movies, or news - and they could take even more channels if they were being used for simple studio-based discussions.

The Imedia system works by breaking up the stream of bits of information in the TV signal into "packets" in the same way that packet-switching is used in other forms of electronic communications. This means that bits of information from complex scenes, where there is a great deal of fast moving action in one channel, are carried by simple scenes in another channel. The channel's real material is then reassembled in the viewer's set-top decoder.

At present, Imedia say that the system can only handle recorded material such as films, but claim that within six months they will have developed the system sufficiently to manage live transmissions, such as sport.

The Imedia system has aroused considerable enthusiasm in companies who are involved in digital terrestrial TV and both the Mirror Newspaper Group and the BBC have expressed interest.



BT's new phonecard uses smart card technology.

Mastering the Smartcard

The credit card organisation, MasterCard, usually known in the UK as Access, is trying to compete with the more widely accepted Visa by adopting smartcard technology. To do this, it has bought control of Mondex which, as has been reported before in ***AUI***, is a form of "electronic purse".

Two years ago ***AUI*** reported on the trial that was taking place in Swindon where the Mondex smartcard was pre-loaded with money and being used to replace cash.

MasterCard have bigger ambitions for the electronic money system. They hope to displace Visa as the world's largest card payments organisation by using Mondex technology not just as a electronic purse, but in all its cards.

MasterCard say that the Mondex card is a much closer replica of cash than the system used by their rival, "Visa Cash". On Mondex, money can be transferred from card to card instead of only to a retailer with a full-size terminal. And the Mondex chip is capable of carrying up to five different currencies in separate "electronic pockets". And, as Mondex money can be transferred down a telephone line, MasterCard hopes the card can be used for payments over the Internet.

Pretty Damn Cwick

In a recent review of a video recorder, we mentioned the magic letters PDC, which provoked some interest from readers. The letters stand for Programme Delivery Control. PDC lets a VCR ignore its timer and start taping only when a TV programme begins. It knows this because broadcasters can give each programme a PDC label or tag. These labels set the date, the time, and the channel. The standard for these labels has been agreed by the European Broadcasting Union.

The broadcaster transmits the PDC label as an invisible part of the conventional teletext signal when the programme begins. Ordinary TV sets and non-PDC VCRs take no notice of the label, but VCRs equipped with PDC pick it up and start recording in agreement with the instructions.

Until recently only Channel Four was officially using the system, but now the BBC have announced that they too are to begin to offer the service full-time after running experimental transmissions on BBC2 and occasionally BBC1. Channel Five is to use it also. Broadcasters in other countries are already employing the PDC system.

It is estimated, though Time Warner won't confirm it, that it cost $25,000 per home.

Making Beautiful Music Together

The old line about "You and I could make beautiful music together" as the preliminary conversational gambit to a move towards a bedroom seduction scene may not be far from coming true. We have heard that there has been a report of a condom made in Hungary that comes - sorry, is sold - with a built-in microprocessor that plays a tune. No, this is not an April Fool's joke. Not only does this scarcely believable device exist, but there is apparently a US Patent for it.

The patent is registered for a "force sensitive, sound playing condom." And, if you think there is little possibility of it being a success, the venerable Editor of ***AUI*** is well-known for claiming to have been present at a solicitor's in Barcelona when someone came in to register a patent on a ridiculous lollipop that also played tunes. It was the infamous chupa-chup lollipop that is now a world wide addition to the annoying things of childish life.

But a musical condom is not the only development in technological assistants of sexual fun and rumpy-pumpy. Another registered patent is for a "phosphorescent condom" - that one will really make you glow in the dark.

There is, while we are in the anti-conceptive mood, another story of these musical condoms that has come from Munich. A certain Frau Love, who manages a condom boutique in that German city, has been selling condoms that when worn and actively used - "Don't just lie there, darling, play something" - give out the cheering notes of "Jingle Bells". No use rushing over to Munich though, for it seems that Frau Love has stopped selling these Christmassy contraceptives due to enraged partners making abusive phone calls to her complaining bitterly of the distracting noise that the damned things made at the most inappropriate moments.

Ah well, perhaps you have to be a horny propeller head or early sexual adopter really to appreciate the latest important technological developments.

Saving Cable

Cable was going to take over the viewing time of the British public. That was the theory that led to a million roads being dug up and pavements and streets being left with lumps. Now, it seems, the cable operators have taken their lumps too, for it appears that Great British public have not found the attractions of the multiple but rather unexciting channels offered by the cable companies at all irresistible. The additional telephony that comes with cable has generated more revenue than the "choice" of channels for which subscribers have been reluctant to pay around £30 a month. Only one in five of those who could have cable have chosen to take it.

In the USA, or more precisely Florida, as ***AUI*** reported early in 1995, there has been a cable experiment run by Time Warner, however, that might be the solution to the problem of how to get viewers to go for cable rather than terrestrial or satellite TV.

Time Warner has, since 1994, supplied 4000 homes in Orlando with FSN, the Full Service Network. This, through a fusion of TV with personal computer and the telephone, seems to have been able to offer a high speed, interactive network that can entertain and inform with the maximum convenience and the minimum fuss and cost.

The lucky 4000 were given digital set-top boxes and a remote control to gain access to "Omnio", the FSN navigation system. In some cases they were given a colour printer as well to print out games instructions and so on. The apparent cost of getting these homes online was not cheap, it is estimated though Time Warner won't confirm it, that it cost $25,000 per home. Some of that was for the $4000 set-top boxes, which would now cost a tenth of that sum.

One of the most popular services was the movies-on-demand ability of the users to access a menu of 100 films immediately at $3 a viewing. However, that viewing meant that they could stop the movie at any time, rewind it or fast forward just as if it were being shown from their own VCR.

Interestingly, they could perform the same functions with the news. So they could scrunch a week's worth of news and connected material into a single block that contained only the items they wanted to see.

As one might expect, there was included that absolutely necessary service, pizza ordering. But the extra wrinkle on that was that the computer would store the usual choice of the orderer and so the request could be carried out more quickly and easily.

The whole FSN experiment has been sufficiently successful for Time Warner to roll out the service nationally in the USA. They plan to spend $5 billion to upgrade their cable systems in 37 states, covering more than 12 million homes to allow them to use a commercial version of FSN.

Ironically, the British cable companies - although most are not British at all having been bought up by US companies - have an advantage over Time Warner. For the British cable systems are based on fibre optic, so they could carry the FSN-style services without having to spend those billions on upgrading the cable to deliver them.

The British companies have spent an estimated £7 billion on ripping up the streets and knocking down the trees and have not gained much in the way of profits to show for it. They could do worse than offer really what people want instead of multiple channels that may offer "choice" for £30 a month, but don't really compete with quality programmes with either the "free" BBC or other terrestrial or subscription-based satellite channels.

Goodbye Windows?

In what is thought to be the most serious challenge yet to Microsoft's domination of the world's personal computer software market, a number of the USA's largest companies have joined forces to attempt to produce a new software standard intended to challenge Windows.

The companies, which include IBM, Oracle, Sun, and Netscape, have agreed on specifications which they say will allow different computers with disparate software to operate with each other without difficulty.

The companies make no secret that they are going to try to get computer industry acceptance of the new standard. "This initiative starts with four companies, but our goal is for an industry groundswell to develop", Steve Mills, IBM's general Manager of its software division, told ***AUI***.

Hitachi plans to launch a camera this year using the same technology that will, they say, store up to 3000 images or 20 minutes of moving video on a chip card.

If the companies can gain widespread acceptance for the standard, it could prove a competitor for Microsoft's Windows. As the Editor of ***AUI*** constantly says, "Change is the only permanent thing in our lives." Although the overtaking of Windows is a change that would astonish many people in the computing world even if it would delight most Amiga users.

Chess, mate?

About to take place in New York is a return match between world chess champion Gary Kasparov and Deep Blue, IBM's chess-playing SP2 parallel processing super computer. Last year, after somewhat sensationally losing the first game, Kasparov recovered to take the six game challenge.

However, over the last twelve months, it is claimed by IBM that Deep Blue has learned a great deal and will give Kasparov a harder time this year. The real brain behind the computer is Joel Benjamin, a former US chess champion who works with IBM. It is claimed that he has helped the computer become more flexible so that programmers can make adjustments between games to correct weaknesses in play.

The chess challenge may be great publicity for IBM, but there is more behind the technology than that. What IBM is demonstrating is the ability of computers to be programmed as expert systems and follow rules that could become aids to human experts, just as calculators are today at a more basic level.



CD-R gold discs will become more common now that CD writers are cheaper.

Solid State

Though DVD with its several gigabyte storage capacity is the flavour of the season, this optical method of being able to pack billions of bytes onto a disc is not the only system that is gaining fans in the computing industry. Many companies are looking beyond optical to solid state storage.

Solid state storage systems use chips rather than tapes or discs. Chip-based devices can be made smaller and have few if any moving parts. The advantage of this is that it greatly reduces power consumption.

A growing number of consumer devices already use solid state memory storage. The closest to home is the telephone answering machines that use a chip rather than a tape for storing messages. Companies such as Kodak, Canon, Fuji, and Ricoh make digital cameras that store images on a memory chip rather than on film. Hitachi plans to launch a camera this year using the same technology that will, they say, store up to 3000 images or 20 minutes of moving video on such a chip card. Already waiting to come onto the market is a hand-held player from NEC that is claimed to store video on a chip. Using powerful compression techniques it is said to store four minutes of video on a 40Mb card. NEC says that 1 gigabyte chips will be arriving within the next three years which will allow even greater storage. At the moment, the cost of solid state memory remains high compared with other media. A 10Mb card costs about £200 but, as usual, that early price is expected to fall rapidly.

Vive La Difference!

With the advent of CD-Recordable (CD-R) and its likely widening acceptance, it is worth knowing the difference between it and ordinary CD-ROM. The first noticeable difference is that a CD-ROM is silver in colour and CD-R is gold. Hence the famed "Gold disc" that everyone talks about as an early master. And what was put out by the late lamented partner CD magazine of ***AUI*** for the CD32 which ran a competition with gold discs to be found by the winners.

CD-ROM/Audio discs such as those containing music and available in record shops are created by "stamping out" copies from a master disc, often tens of thousands at a time. The data is stored on the disc as the CD-ROM is stamped out. The discs are coated with a layer of aluminium and protected by a layer of clear lacquer. The layer of aluminium gives the top of the disc its silver colour.

CD-Recordable discs are created by writing information to a blank CD-R disc on a CD writer one at a time rather than stamping out as with

CD-ROM. CD-R discs are coated with a layer of gold which has better reflective properties than aluminium and gives the top of the disc its gold colour. The layer is coated with an organic dye such as Phthalocyanine and protected with a layer of polycarbonate plastic.

Both CD-ROM and CD-R can be read by a normal CD-ROM drive. As more and more users acquire CD writers - their price has fallen in 18 months from around £1800 to under £400 - we shall see an increasing number of "home produced" CDs. Look out for those gold discs!

HiQ's RTG

It is not often these days that we have the chance in ***AUI*** to bring in the Amiga, or things connected to it, into the Technology Today section. Not all that much is happening in the Amiga field to merit it. However, now and again we are lucky and it seems with HiQ's latest development there is something that Amiga users will welcome that puts the computer up with leading edge.

HiQ's interesting development is Retargetable Graphics (RTG) which they have linked with their Siamese system. It is currently at the Beta testing stage, but HiQ are confident that they will soon be able to release it to the market.

As HiQ point out, it is a sad fact that even cheap PC graphic cards can outperform even the best Amiga cards but if, as with the Siamese system, you can connect the Amiga to a PC, then you can take advantage of that sad fact. RTG lets you open up Amiga screens on your Windows' desktop, at high resolution, in high colour, and with no flicker - assuming the PC's graphic card and monitor can handle the demands.

You are really sending all the graphics data via the serial port and that could make it rather slow. Certainly, if you are blitting huge images on screen with something like Lightwave's animation preview, it's going to be slow. Yet for general use, for such things as Workbench, it feels as fast, if not faster than using an Amiga graphics card.

In 256 colours, RTG is many times faster than the AGA chipset. Windows move instantly - with the built-in RTG solid window moving - and gadgets are drawn at lightning speed. Running at 11500 baud, Siamese RTG is claimed to be able to draw lines 500 times faster than the Amiga's chipset! That speed even outperforms a graphics card.

A neat idea to get around the possible slow speed of serial port transfer is to use the Siamese MountPC to transfer animation. That could get the PC to use its CPU to convert and decode the animation, and the PC's graphics card can do the hard work of displaying each frame at high speed. The result would be an animation player that plays animations much faster than the Amiga, but in an Amiga window.

Real Time

Real time 3D is a big thing these days. Almost every week new PC cards are being brought out, each claiming to be better than the last. Amiga users shouldn't feel left out. After all, CyberVision is on the market, isn't it? Yes, but unfortunately it seems that it is without 3D support. Shame!

HiQ say though that with the help of Siamese RTG the Amiga can control OpenGL. One happy user commented that "My PC doesn't even have a 3D card in it, my Pentium 100 was doing all the work."

HiQ's Siamese RTG certainly sounds worth looking into. The price is a reasonable £59.95.

Contact: HiQ Limited, Tel. 01525 211327 Fax. 01525 211328 Eml. steve@hiqltd.demon.co.uk

Look Small

For cyclists and others who burn up the roadways but are less protected than motorists, looking at what is behind them is not always an easy thing. However, Californian company CycleWare has come up with simple but effective device to overcome this problem. They are selling a tiny mirror that can be stuck on the inside of a pair of ordinary spectacles or sun glasses. "Spy" as they call the tiny mirror measures a mere 3/8 of an inch but provides a surprisingly wide angle view. Spy costs just $10.

Contact: CycleWare, 323 Spreckels Drive, Suite D, Aptos, California CA 95003 USA

Loud on the Road

While on the subject of devices to make life that much better for two wheeled humanity, in some states in the USA it is illegal to use a personal stereo system while biking along. One way around this is have the system built into the bike itself. A company in Dallas, Texas, has found a way to install the stereo onto the frame of bike and clip the speakers onto the handle bars. They say that the system works with just about any personal Walkman-type stereo system. And it weighs a featherweight 220g which shouldn't make fizzing up those hills any more difficult. The bike radio costs around £50.

Contact: BYCO Inc., Box 3001, Dallas, Texas 75370 USA

Banking on it

Intuit and Microsoft are rivals in the market for personal finance software - Microsoft tried to buy out Intuit not long ago and was stopped by the US Government. They have now agreed on a truce, a new standard which will encourage online services for viewing bank accounts and paying bills.

If linked to online banking services Intuit's Quicken and Microsoft's Money allow users to download their bank statements and analyse their spending and earning.

Banks, until now, have typically chosen one system, designed their own systems to be compatible with it, and sacrificed users of the rival software, but the joint standard, to be called Open Financial Exchange, is to be made available on the Internet shortly. It will establish a common standard language for the exchange of data and customers.

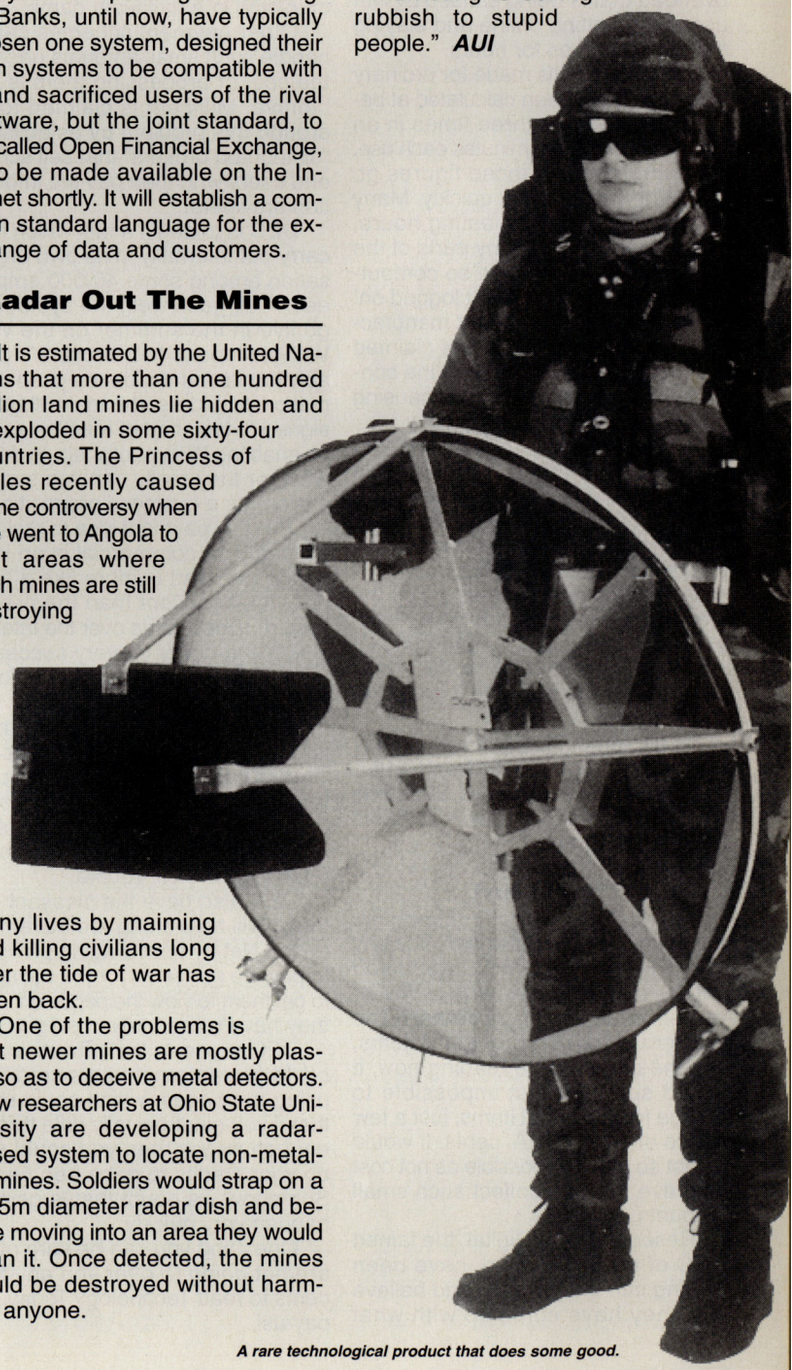
Radar Out The Mines

It is estimated by the United Nations that more than one hundred million land mines lie hidden and unexploded in some sixty-four countries. The Princess of Wales recently caused some controversy when she went to Angola to visit areas where such mines are still destroying many lives by maiming and killing civilians long after the tide of war has fallen back.

One of the problems is that newer mines are mostly plastic so as to deceive metal detectors. Now researchers at Ohio State University are developing a radar-based system to locate non-metallic mines. Soldiers would strap on a 0.75m diameter radar dish and before moving into an area they would scan it. Once detected, the mines could be destroyed without harming anyone.

This is a use of technology that would truly improve the human condition, especially for those who live in these dangerous areas. Why is so little of scientific development dedicated to solving such real problems as these? Is it too much to ask that the kind of ingenuity that is employed in creating similar consumer products, so similar that only their marketeers can tell them apart, or other things for which we have no urgent and, in some cases, even sane need should be put to better use.

Surely that kind of ingenuity could be devoted to producing genuinely useful products. Yes, it probably is too much to ask in this commercially driven, market mad world. As someone recently commented, " Marketing is selling rubbish to stupid people." ***AUI***



A rare technological product that does some good.

The Online Column

Anthony Mael splashes back into the flooding stream of bits they call the Internet.

Unclogging the Logging

In recent *AUI*s there have been several reports of overloaded telephone lines, especially in the USA in such places as Silicon Valley, because of the fast increasing use of the Net. This tends to clog up the telephone lines which were not designed for the overload that is being caused by Net users just getting online and staying there, sometimes for hours.

Telephone calls made for ordinary voice use have been calculated at being used perhaps three times in an hour for about three minutes each use. With the Internet, those figures go down the tubes pretty quickly. Many Net connections are lasting hours, largely because in many parts of the USA local calls are free so computers are logged on and left logged on.

A Canadian equipment manufacturer, Northern Telcom, has claimed that it has a way of relieving the congestion that Internet traffic is causing on ordinary telephone lines.

Their device, called Internet Thruway, is claimed to detect calls carrying data rather than conversations. It then peels them off the voice network and delivers them more efficiently over dedicated lines.

As well as easing pressure on the telephone lines, it is claimed that this will free Internet service providers from costly investment in the modems currently needed to translate data on the voice network.

The Internet Thruway has already been picked up by some North American telecoms companies, including one that is putting it to work in Texas and nearby states.

Millicent

Magazines are not cheap. You pay to read *AUI*. How much would you pay to read separate parts of *AUI* or any other data on the Internet? The problem is that for very small items, say the one you are reading now, it would seem almost impossible to charge for individual items, just a few pence or, in the USA, cents. It would be not so much impossible as not cost effective to try to collect such small amounts.

Researchers at Digital, the famed DEC of the Alpha chip, have been looking into the problem and believe that they have come up with what might prove to be the solution. It is an Internet micro-payment system called Millicent

Millicent is designed to allow Net users to pay a fraction of a cent to access a piece of information. It might be a news item or column, a cartoon, a few bars of music, or even an hour or two of a Java application program, or joining in a multiuser game.

Other payment schemes cannot handle such small amounts because the cost of processing them is prohibitive. Millicent is claimed to get around this problem by establishing "distributed brokers" that sell scrip to end users who then pay the information providers.

DEC is to begin a trial which it will carry out internally in its own organisation among some 40,000 employees. If all goes well, the system will go live in the summer on the Web. With just one or two "brokers" - probably banks - and a dozen or so information providers, the trial will be designed to test market reaction as well as enabling Web publishers to decide whether they really can use such as system as a business proposition.

This tiny payment idea to make individual use commercial is an interesting one and is more like a "pay-per-view" concept than the present system of payments over the Internet, which has not been very successful in generating any real money for information providers.

One ironic point about it is that it is likely to be unattractive to hackers who are not going to want to spend large amounts of time and effort in breaking into something which is only going to yield cents or even less as a reward for their trouble.

DEC also have the pleasant idea that it will help along the advertising on the Net by encouraging providers to pay the millicents for the users just to get them to view the pages on which they have placed advertising.

DEC suggests that advertisers too could give Internet users credits for using the pages, which could mean that if you electronically riffle through enough pages then you could save up your credits to get a free Ferrari. Somehow we doubt that is going to happen very quickly.

One thing you can be sure of, we are not going to offer you any Millicents to read Technology Today. You pay us!

It's Good to Talk - and Surf

BT carries 248 million minutes of local calls every day. Of these it is now estimated one tenth is for surfing the Net. And unlike the dire warnings coming from US telecoms companies, it is unafraid of the lines becoming overloaded. BT's Head of Engineering, David Hughes, has commented delightedly, "Anything that gets people making more calls and staying on for longer is good for BT".

Some industry estimates are that the rise in UK Internet use is approaching 15% per month. That accounts for the surge in the volume of inland calls which grew by 7% in 1996.

Worldcom, a US telecoms company, is less sanguine about the growth. It has forecast that the new uses of the networks will overwhelm the present capacity by 1999.

Nevertheless, despite its apparent pleasure in the increasing use of phone lines, BT say they are developing a digital based technology which, as well as allowing Internet connections at more than 100 times the present speed, will not burden local telephone exchanges.

Into the Intranet Dimension

While the use of the Internet continues to grow fast, it is generally admitted that the biggest potential of the use of the Information SuperHighway will be for those who can afford it best, that is businesses. Their greatest potential is thought to be through Intranets, local networks that use the Internet simply as a means of transport for their private communications.

One organisation that is using the Intranet concept widely is the UK's largest pharmaceutical company, Glaxo Wellcome.

Their comment is that "We think of the Intranet as the telephone. It is just part of the fabric."

Glaxo Wellcome, like most companies, used to rely on departments themselves to collect the telephone numbers of staff working in the unit and they would be published in an internal telephone directory. The company now maintains the directory in electronic form, accessible to anyone with a computer.

As well as searching for others' numbers, individuals can now update their own numbers. And each entry offers information on the expertise of individual staff members. So it allows an executive to ask for anybody in the organisation who knows anything about the matter on which they want information. In the longer term the company intends to link photographs and curriculum vitae to the entry in the directory.

Memos too are now published on the Net alongside news relevant to the company. There is a Newsletter, but that's where the memos are published too. The Newsletter, called 'online', seems to get some 50,000 visits a day. Manuals explaining pensions policy, laboratory procedures, or safety manuals, which staff used to complain were always out of date, are now available in their most recent version over the network.

Of the 21 units in the company's research and development department, 18 now maintain home pages which describe their work, so others in the company can be made aware what is going on and communicate with others if they need help or can offer it.

The Internet, especially for business through Intranets such as that maintained by Glaxo Wellcome, is now overcoming what was the basic problem for company computer networks previously, the inability of many disparate computers to talk to each other. As in most companies of any size, computers had been added for specific needs and without the planned strategy of allowing them to be linked. It was virtually impossible to create a simple all-communicating network. Now, through the Internet, companies can connect all their computers because whatever proprietary language they use becomes unimportant as the Internet itself provides the connection.

Up on the Editor of *AUI*'s wall is a a quote which says "There will come a day when everyone in your company will communicate, collaborate, and co-ordinate in ways you never imagined. How does today sound?"

It looks like, at least for companies as forward moving as Glaxo Wellcome, through the Internet's Intranets, today could indeed be the day. *AUI*

LATE BREAKING NEWS

We have received, as we go to press, some information that we think you would like to have. This seems to happen every month these days. We trust that we won't have to do this again!

Below is a statement put out by Petro Tyschtschenko, President of Amiga Technologies, in Bensheim, Germany. He seems to be one of only three remaining members of the once extensive Amiga staff. He is attempting to keep the Amiga world informed. However, it would be helpful if these communiques could appear more often than at three or four months intervals.

In the NewsFile this month we have a statement from Carl Sassenrath. We have now received another which we think will be of interest to you.

Dear Amiga community:

It has been a long time since you received the last message from me. Since October nothing happened? So it seems at least. But this is not entirely true. First of all, I wish to say thank you to everyone for the numerous emails I received. Of course, I got criticism for my long silence, but in most cases I received motivating encouragement! For these, I thank you very heartily. It is really a great feeling to know that you can still rely on the Amiga community.

What happened meanwhile? First, VisCorp is officially out of the race. There are still some stubborn rumours that VisCorp is interested in Amiga, but officially there is nothing concrete. Thank God I could convince the trustee not to smash Amiga for the present.

Since bankruptcy on July 15th 1996, we continued our business under the same conditions as if the bankruptcy has never happened. In fact, our distribution network has grown. New Amiga distributors are selling our products successful in Russia and in Malaysia. The price structure of our products is on the same level as before the bankruptcy. With our sales we can keep ourselves easily alive and this is great under these difficult circumstances. Thanks to all Amiga fans who actively helped to keep our company alive by buying our products!

Since VisCorp is out of the race, the trustee received a number of very interesting takeover offers for Amiga. He did not commit himself yet, but how I assess the situation is that there will be a decision at short notice.

Who are the bidders? These are companies involved in the bidding process who want to continue Amiga and are also able to guarantee a future for Amiga.

Of course, there are also companies who only wish to purchase parts of Amiga, like the intellectual property. Ultimately, the administrator will make his decision of who will get Amiga. This decision will be based on the size of the offer versus what can be achieved for the overall Amiga. The highest offer is decisive, provided that it is financially secured. Please be sure that we are looking forward to some weeks full of tension.

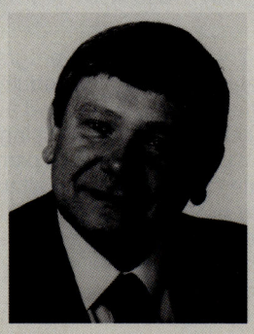
How are we handling our current business? Our company is currently maintained by three employees: Axel Kraemer and Andreas Steep located in Braunschweig, and myself. Meanwhile I have moved my office into the former ESCOM AG building. From here I try my best to keep Amiga alive.

As soon as there is a decision about who is the successful bidder and future Amiga owner, you can be absolutely sure that I will provide you with details.

See you soon.

Yours,
Petro Tyschtschenko

President
Amiga Technologies GmbH
Berliner Ring 89
D-64625 Bensheim
Tel. +49 (0)6251 / 802-111 or +49 (0)6252 / 709-788
Fax. +49 (0)6251 / 802-118 or +49 (0)6252 / 709-427
Eml. ptysch@amiga.de



FOR IMMEDIATE RELEASE
Date: 13-March-1997

Carl Sassenrath Publishes the REBOL Reference Manual, Part 1

The first part of the REBOL(tm) Reference Manual, entitled "REBOL Values: The Building Blocks" is now available online at http://www.sassenrath.com.

This manual, written for both novice users and programming experts alike, serves as an introduction to the first and most important concept of the language. It also includes seven example scripts written in REBOL that clarify the use of the language.

"With just a glance at the examples it quickly becomes apparent why REBOL is a simple, yet powerful alternative to the future operation of our computer systems and the distribution of computer content on the Internet",comments Sassenrath.

He goes on to admit: "I realize that the REBOL language is not for everyone, but there are a lot of us who believe that personal computers have turned into a bad dream, with endless layers of bloated software being forced down our throats by huge stockmarket-driven bureaucracies."

An "educational pre-release" of the REBOL language is expected to be out this month and is intended for people who want to try a few examples of their own, using what they have learned from the manual. Incremental releases of the language will be made over the next few months, with a 1.0 version slated for June 1997.

Subsequent parts of the manual will be published to the Internet as they become available.

The development of the REBOL language is being supported by contributions and will be freely available for personal non-commercial use on a range of computer systems. Corporate licenses and custom versions will be available for a fee.

REBOL is a trademark of Carl Sassenrath.

There you have it, the latest developments in the puzzling, peculiar, and still continuing story of the Amiga. Will there be more from Amiga Technologies or Carl Sassenrath in the months to come? Your guess is as good as ours. ***AUI***

"Chips that made History" *Part 9*

Processors of the Future

Simon Goodwin explains, in the final article of the series, some near-misses of the past and makes predictions for the future of the microprocessor.

High-end processors keep getting faster, more complicated, and more expensive, but there are counter-currents in the market, leading to the development of low-power chips and arrays of simple parts that could take the place of one monster. Modern computers are fast compared with their predecessors, but still slow compared with the real world. Problems such as speech recognition and machine vision swamp today's computers with more information than they can handle.

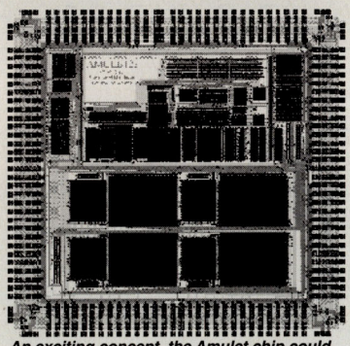
Real-world problems like weather forecasting, fluid dynamics, and modelling from the atomic to the cosmic scale all demand faster computers. In future, high-resolution 3D displays will be generated in real time, using techniques such as ray tracing which currently take minutes or hours to yield results. This should be the death knell of polygons, a trick to reduce the effort of 3D rendering to match modern-day capabilities.

Faster computers allow much more accurate modelling, and better prediction of prototype performance. They will save time in development, allow more ideas to be tried, and could improve the economics or performance of finished products. The real world is still a very complex place compared with most computer models, and we'll need a massive increase in performance to move from the current, quantised step-by-step modelling systems to continuous, algebraic models.

The other reason that speed is important is much simpler, almost to the point of triviality. Speed is easy to sell. Speed tests reduce complex, multi-factorial comparisons to simple ratios. They may be meaningless, but they're easy for vendors and customers alike to 'understand'.

Transputers

Inmos Transputers form classic MIMD systems. A decade ago the Transputer was a revolutionary product with great potential, but it failed to catch on, perhaps because it was ahead of its time or possibly because the Conservative UK government failed to continue to support this British device which had been developed through the previous Labour government's technology funding. Alas, little has been heard of it since the launch of the T9000 processor in 1994 and the sale of Inmos to the Franco/Italian combine, SGS-Thomson.



An exciting concept, the Amulet chip could replace ARM.

Transputer chips are self-contained processors, with internal memory and four high-speed serial links to the outside world. Transputer systems are built as two dimensional arrays, arranged in an interconnected grid so each chip can send messages to the parts above, below, and either side.

An impressive 'Transputer farm' for the Amiga was demonstrated at Commodore's last World of Amiga show, but I've not heard of it since.

The portioning of programs between the chips, and required message passing, is handled automatically by the compiler, using an elegant language called Occam to generate custom code for all the available processors. Occam is named after the philosopher whose catch phrase was 'do not multiply entities unnecessarily'.

Occam introduced vital new concepts but was slow to develop, and marginalised the Transputer in the minds of established programmers, reluctant to learn yet another 'systems' language.

The Transputer offers the possibility of making computers that go twice - or nearly twice - as fast every time you double the number of component processors. An impressive 'Transputer farm' for the Amiga was demonstrated at Commodore's last World of Amiga show, but I've not heard of it since.

Diminishing Returns

Systems based on several SISD processors are common, but not scalable in the same way - you can't keep adding processors - and they're subject to diminishing returns. Twin-processor systems cannot deliver twice the performance of a standalone processor on real problems. In practice even an extra 50% is impressive.

As you add more processors to a standard machine, with one large bank of memory, other problems appear. Typically memory can only talk to one processor at a time, so multi-processor systems spend some of their time waiting for access to the shared memory.

The situation resembles that when viewing high resolution screens on an unexpanded Amiga - the graphics chips get in the way of the main processor, reducing performance. The answer is to add 'fast memory', dedicated to a particular processor, but this doesn't help when communication between processors is essential, and the only pathway is the shared RAM.

RISC chips gain some advantage as they usually have separate buses for instructions and data, so processors can read code without interference. Data caches save time but make multi-processor systems hard to design and test. Most of the errata for the Pentium and Pentium Pro concerned potentially catastrophic interactions between processors sharing memory. Motorola's 68040 never managed the 'bus snooping' which was intended to make multi-processor systems practical.

Current multi-processor systems avoid the worst problems by only supporting write-through caches for shared memory. Values are cached when read, but new values must pass relatively slowly to the main memory, with a message to invalidate copies stored elsewhere. This avoids the risk that one processor's cache would contradict another, but compromises the performance of each processor in the interests of getting them to work as a team. One answer is to put several simple processors on one chip, with a shared cache.

Networks are MIMD systems, and the Internet can be viewed as a vast MIMD computer. Indeed the entire global telecommunications switching network is arguably an MIMD system.

Java

Java is a new programming language designed for the Internet. It allows programs to run on a mixture of computers which may be geographically separated. It's not just a programming language - workstation leaders Sun Microsystems have devised machine-independent machine code for Java compilers, so the same code can run on any computer with a suitable interpreter.

Java is an object-orientated language similar to C++ but more elegant and secure. Java runs on Ami-

Go On

There's a chance that a computer a hundred times faster than today's will manage a decent game of Go, but don't count on it - that will need a lot of software work, as well as hardware development. New computers must be fast to emulate existing programs at useful speeds. At least UAE - the Pentium-humbling Amiga emulator - should run at a decent speed on the processors of the future!

ga O/S, Windows 95, and most variants of Unix, including NetBSD. The virtual machine interpreter makes it slow, but a compiler called Kaffe (on the same platforms) translates Java byte codes into faster native code on a fashionable 'Just In Time' basis.

The long-term significance of Java is that it's an open, publicised standard, and chip makers are queuing up to make real Java machines - computers that run Java code directly. For once, these processors are being designed from the top down, software first.

Intel and HP

In the short term we know what Intel are going to do - the P6L is a version of the Pentium Pro without the large and expensive Level 2 cache chip. But in the long run even Intel realise that 8-bit machine code has had its day.

Next in the x86/Pentium line will be the P7 'Merced' , a 14 million transistor chip, due late next year. This uses a new processor architecture under development in collaboration with Hewlett Packard. Merced is intended to run both HP PA-RISC and Intel x86 code, presumably by interpretation or re-compilation as it's not binary-compatible with either.

The architecture is characterised by the acronym VLIW, which stands for Very Long Instruction Word. This idea comes from mid-80s specialist supercomputers; Merced will mark its appearance in the mainstream, and VLIW is seen by many - mainly hardware designers - as the next logical step after RISC.

VLIW processors pack several instructions to be performed concurrently into a single fixed-length word. This is much longer than a conventional 16 or 32 bit instruction, and fixed in size for delivery en masse on a fast, wide bus.

VLIW responds to the development of super-scalar processors, where each chip contains several execution units capable of simultaneous operation. Typical modern chips grab a collection of instructions and attempt to share them out between the units, keeping as many busy as possible.

This is difficult for processor designers and compiler writers, because the mix active at any one time determines the resources available for the next group, and so on.

VLIW architecture means improved speed, especially on processors with eight or more independent execution units, and a hefty increase in program size beyond that of RISC instructions and 32-bit addressing. Compilers will get more efficient and probably no more complicated, as they'll address the same problems of concurrency in a simpler - if more verbose - format.

VLIW has attractions, but seems very much hardware-led. The chip firms hope that it will squeeze out hand-optimised code, which often throws up anomalies that compilers are too dumb - or cautious - to exploit. Compiled code ends up optimised for a particular processor, bugs and all, and may not run at all on new models with a different word size.

ARM

In the UK, Acorn offshoot Advanced RISC Machines (ARM) are pushing chips in the opposite direction, crunching 32-bit instructions down to 16-bit ones. ARM machine code is already concise by RISC standards, but the 'Thumb' sub-set allows code to be packed into a single 16-bit ROM and expanded on the fly as a program runs.

Acorn claim a 30-40% reduction in code size, without loss of performance. Thumb is no longer unique; last year MIPS and LSI Logic launched a 16-bit code subset for R-x000 processors.

ARM RISC processors are not as fast as the latest RISC chips, but are great for embedded processors, where simplicity and low power consumption mean an enviable power/performance ratio.

ARM processors are in Acorn's Archimedes and Apple's Newton hand-held micros. Its performance has doubled every year and a half, while prices and power requirements fall, and it shows impressive longevity after more than a decade in development. Support from Apple, DEC, GEC, NEC, OKI, Rockwell, Samsung, Sharp, Texas, and Yamaha makes it the only world-class European processor.

Clockless

The ARM developers have a much more exciting development up their sleeve, known as Amulet, based on a principle called micropipelining which eliminates the concept of a synchronising 'clock'. This extraordinary development means that each part of the chip runs flat out, as fast as possible, only pausing just enough to pass values between component parts.

Amulet's asynchronous logic requires less power than conventional synchronous chips, and could potentially be much faster. Six years of pioneering work at the University of Manchester has been funded by the European ESPRIT programme.

Parallel Lines

Computer scientists divide computers into three groups, depending on the degree of parallelism in their design. Conventional computers are known as SISD designs. The initials stand for Single Instruction, Single Data-stream. They work sequentially, processing one instruction and one data item at a time.

Some difficult problems - such as weather forecasting - require the same operations to be performed on many equivalent items of data. These problems led to the development of SIMD machines, also known as array processors. Intel's MMX extension is the latest variation on this theme.

SIMD machines, for example, obsolescent Cray super-computers, apply each instruction to several values simultaneously. Only the arithmetic part of the processor needs to be duplicated for each value. Peripherals and complex control and instruction sequencing logic can be shared between all the processing array elements, so the combined machine is much faster than the SISD equivalent, but not proportionately expensive.

SIMD machines deliver amazing benchmarks but they're hard to program. They're rather specialised, best suited for a small range of inherently parallel tasks. If a problem splits into parts of varying size, or with many sequential dependencies, it's hard to implement on a SIMD machine; much of the performance advantage is wasted because there's not enough truly parallel work to keep the whole processing array busy.

The MIMD computer has Multiple Instructions acting on Multiple Data items. This is similar in principle to a collection of SISD computers, but a true MIMD system is distinguished by fast links between processors, allowing them to share the processing load and keep the whole array busy.

The new Amulet 2 has 4k of on-chip memory, visible in four blocks in the lower part of the picture, and delivers 42MIPS from just 150mW of power. In theory Amulet will go ever faster as it is shrunken onto smaller slices of silicon, avoiding the re-design work needed to keep parts of synchronous chips in step as they're scaled. Amulet is not yet a commercial product, but it's an exciting development for the future.

IBM and Motorola

IBM has its finger in two pies: PowerPCs - a joint Apple/Motorola/IBM effort - and 686 Intel clones, through their contract to make chips for Cyrix. IBM almost certainly have in-house projects of their own, but they're not revealing details at this stage.

Motorola also backs old and new technology, in the shape of PowerPCs for workstations, and 'Coldfire' for embedded controllers. Coldfire chips are exciting for Amiga owners because they run 68k machine code, bizarrely relabelled as 'VLRISC' for Variable Length Reduced Instruction Set Computer.

Motorola re-sell the elegant 68k design now that its code density compares favourably with fixed-length RISC chips. The first Coldfire chip contains a 68EC040 core with slightly reduced caches (2k code, 1k data). The difference is that this 'embedded control' variant costs a fraction of the price of a 'real' 68040.

Later Coldfires miss out some 68k instructions, like DIV and binary rotation, but can still be programmed with 68k assemblers, compilers, and other tools. This is good news for experienced 68k programmers, if not necessarily for Amiga users.

The lack of some standard 68k instructions rules out the new MCF5200 series for Amiga use, but the fully-compatible MCF5102 chip was a contender for Amiga Technologies' Walker project. It would have been much faster than the 68030, but more difficult to interface to the AGA custom chips which assume 68020/030 timing rather than the optimised 32-bit bursts of Coldfire, 68040s, and 68060s. Even so the MCF5102 is a possibility for future accelerators or fast, low-end Amigas.

68080

The 68000 architecture is far from worn out - there's still scope to trump the 68060, using instruction pooling like a Pentium Pro to avoid input delays, and a pipelined floating point unit. If such a '68080' appears it should have a microcoded 64-bit unit in addition to the 68060 resources, for instructions that the 68060 must emulate.

Motorola predict that by the turn of the century the average home will contain 225 processors of all types. Most will be invisible, embedded in appliances. The future of computing is ceaselessly developing and microprocessors will be at its heart. ***AUI***

PAINTING THE WEB

Graphic artist Shelley Hannan tells you how to jazz up Web page design using Personal Paint 7's new features.

Before we can begin creating Web page graphics, we have to have an idea of what we are going to create. My Web page is about film and fashion, so I'll obviously try to incorporate both these elements into the graphic I'm producing as an example.

You should always sketch out your ideas on paper first, because there is nothing more pointless (and frustrating) than staring at a blank PPaint screen (well, maybe a few...). Once you have a rough Idea of what you want, you can now set about achieving it. I have decided to use a black and white digitised image of an interesting looking fellow from the French 1930's classic movie 'Un Chien Andalou'. (Be careful when choosing images as virtually everything nowadays has some sort of copyright attached to it).

Always start with the best quality you can get and then convert down. I started with a 24-bit hi-res scanned picture which was loaded into PPaint running on 640x512 in 256 colours. I always choose Floyd-Steinberg dithering from the settings menu as well as having 'best-quality' turned on. It takes a while to dither, but the end result is worth it.

I now have to remove the background from the image as I only need the man... No quick solution here I'm afraid, just good old fashioned hard work. This requires carefully drawing around the man with the background colour (in this case I have decided on white), so I used the large nib brush to start and then the filled rectangle tool to remove large areas of colour. Once cut out I save the image (something you should do often).

Obviously, the man is too big at this stage so I must resize him to a more Web-friendly size. In this case half-size will be fine. Before he is picked up as a brush, I go to the 'Settings' menu and select 'colour Average Resize' within the 'Graphics' section of the menu. This makes the resizing much 'smoother' by anti-aliasing the colours as it shrinks rather than just removing pixels. So, once this is chosen, the graphic can be picked up as a brush and then 'half-sized' from the size option in the 'Brush' menu (or just push the 'h' key). Right, so far I have a nicely cut out and resized digitised image, the only problems it has its own 256 colour palette, and in this case all grey.

When designing Web graphics, colour is at a premium, and 256 colours are generally all you have to display everything... So we certainly can't afford to use all 256 colours as greys. Time to reduce colours. In any greyscale image sixteen greys is enough (even 8), especially when reducing within PPaint, but for now I will just save the small version of our graphic as a 256 colour brush (it doesn't matter which format you choose). With the picture sorted out (for now) I can begin work on the text and final layout.

This would be a good time to decide on what palette and resolution you are going to use, obviously the more colours, and higher the resolution, the better. Generally all Web browsers (IBrowse, Voyager and so on) run in hi-res interlaced 640x512, so you shouldn't ever work in a lower resolution. As far as colour goes the less colours you use, the smaller the file size and the faster it will download. Most PC and Macs run in a minimum of 256 colours and some run in 24-bit. We can also do it in IBrowse and Voyager, but it does require a lot of speed and RAM. Therefore many Amigans only ever see the Internet in 32/64 colours. If your page is for Amiga users only then maybe you're fine keeping it all within 32 colours, but if you want your page to be compared with all that is out there, then I think 256 is your target. So I'll go for 256 colours.

Which 256 colours?

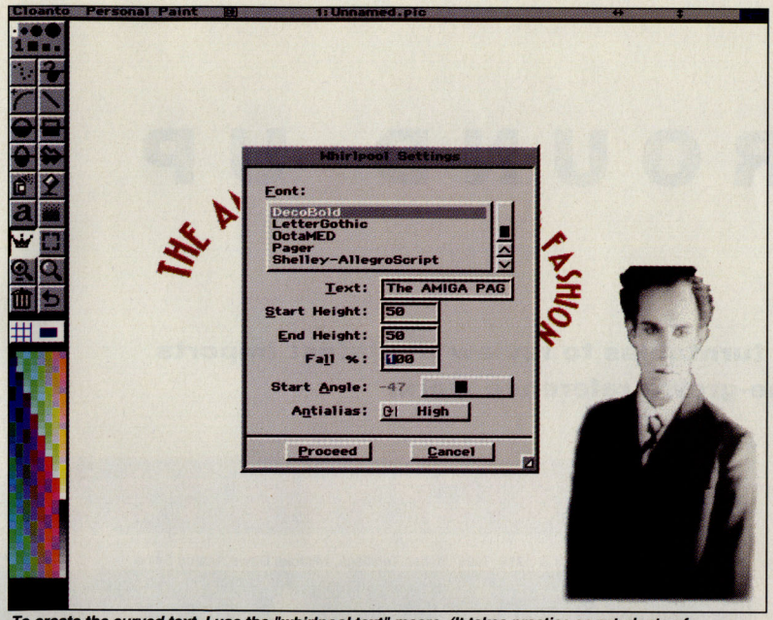
Luckily, PPaint 7 comes with the ISO colour palette which you can choose via the new Macro button in the toolbar. Click on the crown button and up pops the macro requester. You can then choose ISO colour and you are ready to draw with a carefully prepared palette catering for



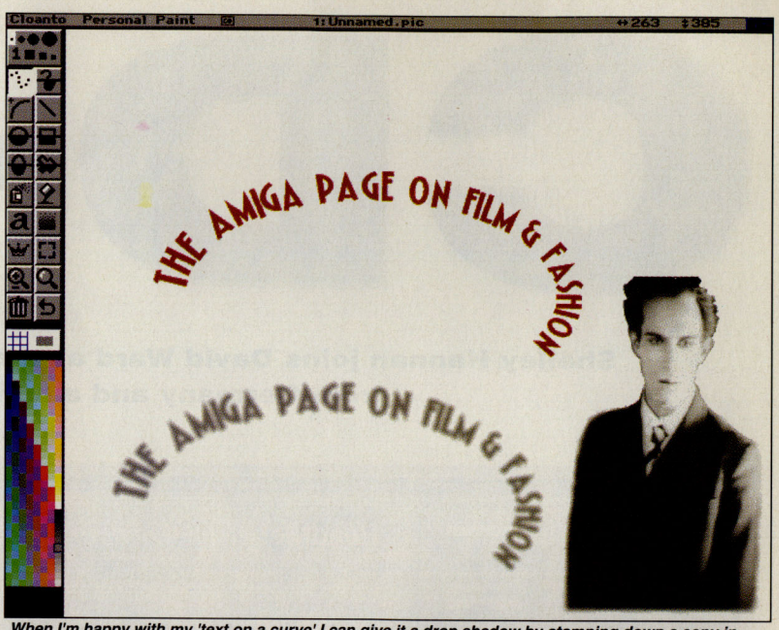
Starting out with the full screen 256 grey-scale picture, you will have to remove the background by hand.



Once you have done this, it's time to scale him down (remember colour average resize ON in Settings>graphics menu when you resize it).



To create the curved text, I use the "whirlpool text" macro. (It takes practice so set plenty of undo levels).



When I'm happy with my 'text on a curve' I can give it a drop shadow by stamping down a copy in grey and then blurring it a few times.

nearly every shade you want, and what it doesn't have can be mixed (via the art of dithering).

I'm going to have a white background so I click the right mouse button (rmb) on white in the palette and clear the screen (shift k). Time to begin. Loading as a brush (F5) the brush of the cut out man (remember to choose Floyd-Steinberg dithering and best-quality from the settings menu) it takes a while to dither, so be patient. Once it is done it will look a mess probably because its palette is different to the one already in use. I now remap the brush colours to the new palette, which is done by choosing 'remap' under colour in the brush menu (or press alt-r). More time will pass while it remaps. All worth it, I assure you.

When it has finished you really won't be able to tell the difference between the 256 colour brush and the now remapped to only eight-greys version. Save the brush again, to be on the safe side, under a different name if you like, just in case. Once saved it can stamped down anywhere. This is where we discover that the brush's edges are very jagged and rough. To cure this I will blur them.

Clicking with the right mouse button (rmb) on the image processing button (the one next to the text button) calls up a requester. I choose BLUR HIGH and also activate F-S Error Diffusion at the bottom - this gives a smoother blend between colour by dithering between them. Clicking left mouse button (lmb) on the Image processing button allows you to cycle through rectangle/freehand/brush for selecting the areas to process. I like to use freehand because I only want to blur the edge around the man, not his whole torso, and also I'll do some bits more than others to try and not have any straight lines or uniform blurring to make it bit 'organic'. He also appears to be missing the top of his head so using the normal drawing tools I add some hair.

Right, the man is now finished, he has been remapped to my preferred palette, stamped down, and blurred.

Let's do the text

I don't want a straight line of text, I want something curved. So I use another of PPaint's new macros to wrap my text on a curve. Once again clicking on the rmb on the macro button (the crown) calls up the macro selector and I choose 'text whirlpool'. I now have to draw an ellipse to wrap the text onto. Once done a requester pops up allowing choice of font. I type the text to wrap, choose the size, the angle, and anti aliasing to smooth away the edges.

You will have to experiment with this quite a bit until you achieve exactly what you want. Once you are happy with the result, you may decide you want a drop shadow to give that extra lift, no problem. To do this pick up the text as a brush, push F2 to go into colour mode, and choose a medium grey or a darker shade of the background colour. You should then see the text brush change accordingly. Stamp it down in some open space.

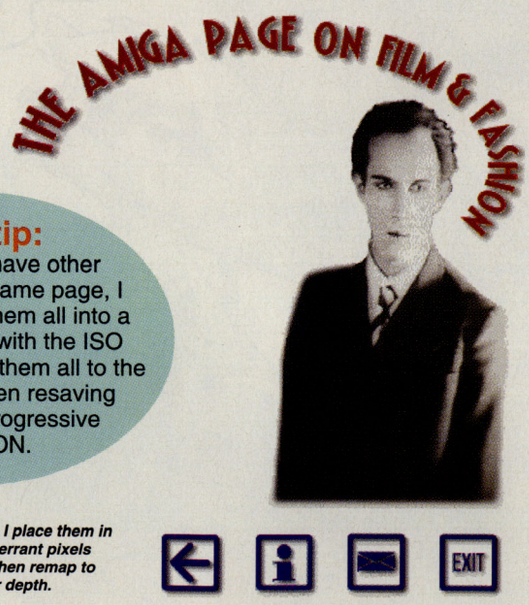
Once again the edges will look ugly, jagged, sharp, not very shadowy, so make a soft-shadow using blur as I did before but this time enclose your whole shadow and leave dithering off. It will slowly begin blurring and looking more like a shadow. You can repeat this process for an even softer shadow. Once happy with the result, pick up the original text and stamp it down over the shadow with a slight offset (usually up and left), the greater the offset, the higher the text appears to be floating. When you are happy with it pick up the completed text and shadow and place it where you want it.

Icons

All I have left to do is place some icons at the bottom of the image because I have decided to use it as an image-map which we can make with another of PPaint 7.0's new macros. I'll put in a 'back to previous page' icon, an 'information' icon, a 'mailme' icon, and an 'exit' icon. The process used on these to create the shadow is exactly the same as for the text, so you should manage easily on you own. All that is left is to play around with is positioning of all the elements. When you're happy save it as a brush. REMEMBER to save it as GIF since the Internet only accept GIF and JPEG file formats at present. When in the save requester click on GIF and then options, which allows you to save it as gif89a (which will make the background transparent) or progressive display (which is for interlaced gif). You SHOULD save with progressive display on. If you've been on the Internet before, then you have seen interlaced GIFs - they start out lo-res and then build up into the final image.

As this graphic is not very colour heavy, I could render down to 32 colours without any noticable loss. To do this you go to image format, change colours from 256 to 32, click okay, make a cup of tea, and you will now have a much smaller file with which to contend.

Happy Web site designing. ***AUI***



Final tip:
If you want to have other graphics on the same page, I suggest loading them all into a 256 colour page with the ISO palette, remapping them all to the same palette, then resaving as GIFs with progressive display ON.

Once I have all the elements, I place them in their final positions, remove errant pixels and blur the jagged edges. Then remap to the desired resolotion/colour depth.

CD ROUND UP

Shelley Hannan joins David Ward at the turntables to review the latest imports from Germany and a home-grown reference work.



APC&TCP Vols. 1 & 2



Epic Marketing

APC&TCP is, apparently, a German computer club and not, as you may have imagined, a wicked combination of antiseptic lotion and armoured car. Being German in origin, you'll will have to accept the unfortunately large number of text files that are in that native language. Therefore, unless you speak it fluently, the directories full of disk magazines like "NoCover" and "AmigaGadget " will be alien to you, as will many of the doc files that accompany the games and productivity software.

However, the discs are cheap and packed full of lots of useful items, both commercial - which are labelled "Copyright!", shareware, and freeware. There are a fair number of utilities that have never seen daylight in the UK... for obvious reasons. One I was particularly taken with was a map program that displayed German Autobahn routes along with hotels and other information. The quality of the interface and the clarity of the map info was so great it put GBRoute (remember that?) well into the shade.

A problem I did notice was that some of the software required you to have a beefy Amiga system before you could run it. One game reporting "Out of memory" on my 6Mb A1200 came as a nasty shock, while others assume you have a VGA monitor.

The second disc, Volume 2, contains over one and a half thousand images in GIF, IFF, and JPEG formats. No, these are not three different formats of the same picture as you would find on some compilations, but the original formats in which the images were saved.

Hand drawn, digitised, and rendered images of extremely high quality have been collected for this compilation. Some will be familiar, others new. The only fault I could find with Vol.2 was that APC&TCP have not generated thumbnail screens of the images to make selection of a picture easier. This is one of those discs where you have to view every picture individually, a very time consuming task.



INFO

Rating: 83%

PRICE
£8.99 each

FORMAT
Amiga

Golden Demos

Weird Science

It was just a few short years since I discovered the excitement of demos. That day, when I put the Crionics megademo into my trusty A2000's floppy drive, will never be forgotten. It came on one disk and it was fabulous. I must have watched that anim of Madonna at least...

Of course the professionals, such as the NewTek demoreels, came on more than one disk. Do you remember the amazing Walker demo for instance, and some of the epic Eric Shwartz cartoon adventures. Nothing beat the thrill of getting your hands on the latest (well almost nothing), and in a six month period you could build up a collection of about thirty disks of the most recent releases. If you were one of these demo collectors, then you were one of us, the 'hard-core'. So, when the Golden Demos disc arrived here at ***AUI*** I went gaga!

Things have certainly progressed since those days. Over 500 floppies worth of demos tracing the Amiga demo scene from the golden, single disk halcyon period up to today's 30Mb offerings. You will find demos, intros, slideshows, music-disks, and diskmags for both AGA machines (395Mb) and OCS machines (260Mb). This will take you ages to get through.

While Schatztruhe claim that all files are executable via a mouse click, we can also claim our tap water is pure. These demos either need decompressing to RAM, for the newer ones, or floppy disk for all the older ones. This means lots of clicking, unpacking, finding blank floppies, and so on. The AmigaGuide interface is, in some way, similar to that of the Aminet CDs, but Aminet discs are much better set up. This is because it's all automatic whereas, on the Golden Demo CD, you have to unpack the selected file, shrink the window, open up RAM:, find the icon, and then run it. Call me lazy, but... okay, call me lazy.

Many demos would not run on my A1200 first time. If you degrade your system, then the majority can be made to work. This is in no way the fault of Schatztruhe, it is how the demos were written.

You will find many old classics here as well as some brilliant new ideas. Many of the demos I would rate at well over 90% by themselves, and to see that Crionics megademo again after all these years... well, it makes me remember why I bought an Amiga.



Admittedly you may become a little bored of the multitudes of shaded phong objects and image-mapped cubes, but don't let that deter you from enjoying this fine collection of demos. Not everything is here, but there is certainly enough to make it worth it. Great collection, pity about the interface. This needs improving and there could be some kind of Help guide explaining how to run some of the more stubborn demos and whether some work at all on certain machines.

INFO

Rating: 87%

PRICE
£14.99

FORMAT
Amiga

Epic Encyclopedia

Epic Software

Those of you who actually read the adverts will have noticed over the past year a small paragraph appearing regularly on Epic Marketing's pages in the Amiga Press. "We need your help!" it said in bold letters, and went on to ask you, the reader, to help contribute to Epic's exciting multimedia CD title that was then in development. Epic Multimedia Encyclopedia to be exact.

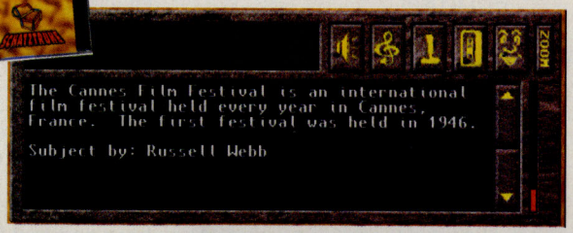
This was a gigantic project for any company to embark upon, and would no doubt be compared to productions such as the fondly remembered Hutchinson's Encyclopedia that came out for the now nearly forgotten CDTV. Unlike Hutchinson's offering, whose production team could rely on the company's existing printed version, Epic needed to start from scratch.

By asking the Amiga community to contribute subjects, Epic could build up a usable product in a fairly short time without throwing large amounts of money at the project. Think of Microsoft... think of Encarta. Now think of Epic... what do you see?

Considering they lack the ability to pay for experts, picture libraries, and publishing rights, Epic have done a very good job of explaining thousands of subjects and linking some of them to pictures, sounds, and anims via an easy to use interface authored in CanDo.

The disc needs to be installed on your Amiga, which needs a minimum of 4Mb of RAM by the way. This procedure takes a fair amount of time, the end result of which seems to be a lot of empty drawers on your hard disk. However, these have been set up to hold the updates which come on floppy disk. There's no need to press a new batch of CDs when a floppy will do the job.

The Epic Encyclopedia's interface works very well and even allows you to print out the text and, if there is one, the pictures that accompany it. That has been one of the complaints by owners of the previous version of the Encyclopedia - not enough pictures.



And it is a problem we at ***AUI*** understand all too well. Let's say you want a picture of a Mexican hairless dog. First you have to find a picture library that has such a photo and then stump up the readies to pay for it. About £50 per picture on average. Now multiply that figure by the number of pictures you require and you will soon see your multimedia production costing more than your proposed budget. So we concur with Epic on this point.



However, we do feel that some of the pictures they did get hold of could have been treated a little more carefully after scanning, the dithering leaves a lot to be desired. And that a handful actually matched the subject they were illustrating. Also, the problem with using non-academics to produce the subject text can lead to wonderful explanations. Here's one I fell in love with: The Cannes Film Festival - The Cannes Film Festival is a film festival that takes place in Cannes. The obvious definition really.

Ignoring these few niggles - ***AUI***'s reviewers always explore CDs deeply - we can say that Epic's latest version of their Multimedia Encyclopedia shows what the Amiga and CD-ROM can do. Sixteen thousand subjects are covered with four thousand colour and monochrome images to accompany them along with two hundred film clips and sound samples. All for under thirty pounds. dValue for money? It sure is.

INFO

Rating: 90%

PRICE
£29.99

FORMAT
Amiga

CONTACTS

Epic Marketing
139 Victoria Road
Swindon, Wilts.
SN2 2NF
Tel. 0500 131 486

Weird Science
1 Rowlandson Close
Leicester
LE24 2SE
Tel. 0116 2340682

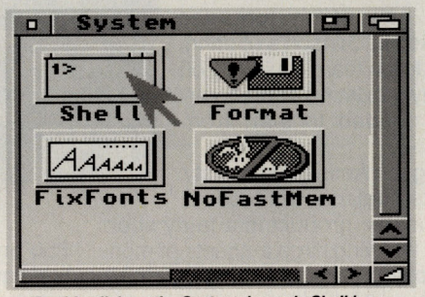
MAKING A START

This month Paul Overaa gives beginners the perfect chance to find out what ARexx programming is all about.

ARexx is the only language with which Workbench 2.0 and above Amiga owners are provided. It can be used in a number of different ways, for example, you could write an ARexx script, a small ARexx program, that displayed your name on the screen then it would let you do it very simply. The area where ARexx really scores, however, is that it contains special communication features that enable programs to send messages to each other.

Before you can even think about creating scripts that control other programs you need to know a little about ARexx itself. So the purpose of this month's tutorial is to show you the steps needed to create and run a simple script. To start with you will need to open a Shell window by double-clicking on the Shell icon that you will find in the Workbench System drawer. ARexx programs are essentially just normal text files and can be created using any text editor program. The Amiga's ED will do although you can use a word-processor as long as it is able to save normal ASCII text files. Default word-processor document files always contain special formatting characters which will often prevent scripts from running.

Those of who have not used a Shell window before need to know two things about specifying Shell commands. First, you must type the name of the command to be carried out (along with any other information the command might need). Second, you must press the Return key because this lets your Amiga know that you have finished typing a command. We are going to be creating a file called test.rexx in the Ram Disk and this means that, with ED, the Shell command line needed is:

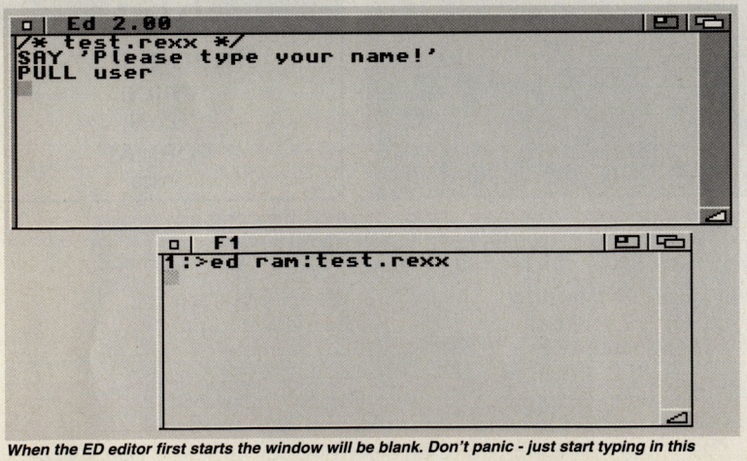


Double click on the System drawer's Shell icon to open a Shell window.

```
ed ram:test.rexx
```

The moment you have typed this command and pressed Return a window will open. At this point you can create a script. Type in the following five lines (exactly as written) pressing the Return key after you enter each line:

```
/* test.rexx */
SAY 'Please type your name!'
PULL user
SAY 'Well hello there' user
SAY 'hope you are well!'
```



When the ED editor first starts the window will be blank. Don't panic - just start typing in this month's example.

What It Means

The first line, enclosed by pairs of /* and */ characters, is called a comment line. All ARexx programs must start with a comment and it's a good place to put the name of the script. You can put additional comment lines anywhere in an ARexx program and, as programs get larger, a few extra comments are often useful.

SAY is a statement that makes ARexx display things on your Amiga's screen. In the second line of the program I've specified the phrase, 'Please type your name!' by placing the text between a pair of single quote marks.

PULL is another ARexx statement and this allows typed input to be collected from the user. The important thing to notice about this part of the program is that there is a term - user - which follows the PULL instruction. This is not just another piece of text, it is a special item, a variable, which represents part of your Amiga's memory.

Variables are used to store numbers and text that may need to be changed during the time that the program runs (and in our case, for collecting the script user name). It is best to use variable names that are understandable so I have called the variable... user. The last two lines of the program are more SAY instructions. One line prints 'Well hello there' followed by the user name, the other just prints 'hope you are well!'.

Almost Home And Dry

Having typed in this small, but still eminently runable, ARexx program select Save from ED's Project menu to save it to the RAM disk, then choose the Quit option. You will find yourself back at the Shell window and to run your script you now just type RX followed by the script's name like this:

```
rx ram:test
```

If all goes well a message will appear asking for your name and, when you enter this (and press the Return key), you'll get your personalised 'Hello... hope you are well' message. If it did then congratulations - that is an ARexx script written and executed!

Yet you might not have been quite so lucky. ARexx has certain rules about the way statements are written and if, for example, a quote mark is missing, or you write SAAY instead of SAY then ARexx will complain. You would then need to use ED to look at the script again, correct the mistake, and re-save the script before trying to run it again. This is what ARexx programming is all about. Deciding what you want done, figuring out what type of ARexx commands are needed, and making sure the statements are written properly. Sure it takes practice, but one thing's certain - it is worth it because ARexx is probably the most useful language an Amiga user can learn about. ***AUI***

Starting ARexx

You can start ARexx by double clicking on the RexxMast icon in the Workbench System drawer, but a better idea is to have ARexx start automatically whenever you switch on your machine. To do this just drag the RexxMast icon into the WBStartup drawer. You will not actually see much - just a small window that provides a brief sign-on message before all visible traces of ARexx disappear. Don't panic ARexx WILL still be present in your Amiga's memory - ready and waiting to run any scripts that come along.

Cracking the Shell

Recoverable RAMdrive

Kevin Bryan explains how to get into non-volatile RAM.

The MOUNT command is used to add devices that don't automatically attach themselves to the System. Most devices, DF0:, DF1:, the 'RAM Disk:', hard drives, and so on, mount automatically and the whole process is invisible.

Devices such as 'Speak:' (last seen on Workbench 2.04) and 'Pipe:' (all machines) need to be mounted manually and, as these use very little memory, they are often done so at startup.

Where you are most likely to use the command is when you wish to add a RAD: (Recoverable RAMdrive Device. No, I don't know why it isn't called a RRD: either). Unlike the 'Ram Disk:' device, RAD takes up as much memory as its specified size demands, even if it contains nothing. If you specify an 880k RAD, then that much memory, plus another 40k, will be used to maintain it. For this reason, you probably wouldn't want RAD to be mounted every time you boot up, unless you have loads of RAM available.

The command syntax is:

1.> mount <device:> [FROM <file>]

Unless you specify a file to mount the device FROM, the Devs:Mountlist file will be searched for the named device and it will be mounted. You can check to see if it has been mounted even if nothing shows up on the Workbench screen by typing the ASSIGN command in the SHELL. Sometimes a RAD needs you to 'wake it up' by performing a DIR on it. Hence: 1.> Dir RAD:

Note: From Workbench 2.1 onwards, MOUNT has been 'Intuitionised' with DOSDRIVERS. These are basically individual Mountlist entries with an icon attached. Devices to be mounted at startup (like Pipe:) are found in the Devs:DosDrivers drawer. Other devices are in the Storage disk|drawer. Should you want to mount any of these at startup then you should drag their respective icons from Storage to Devs:DosDrivers.

If you are mounting a RAD from DOSDRIVERS then click once on the RAD icon, select 'Information' from the Icons Menu (Right-Amiga I) and change the tooltype ACTIVATE=0 into ACTIVATE=1. Then click on SAVE.

Included on this month's SuperDisks is an uncomplicated script that will allow you to set up a simple example RAD: device which you will be able to boot from and save to. To run it, just double-click on the RADical(sorry) Icon. When it has finished you will have to reboot before it will work. Remove the disk(s) from the drive(s) and do the Vulcan deathgrip. (CTRL Left-Amiga Right-Amiga) and watch the magic.

What you will have is a cut-down Workbench disk with about 880k capacity and a SHELL Icon and some basic SHELL commands. You will also notice that quite a large amount of your available RAM has been used up. This is one of the shortcomings of using RAD, you need plenty of RAM. You can specify the size of your RAD by editing the 'MyMountlist' file in the RADical drawer. Take a look at it with ED. The line we are interested in reads:

LowCyl = 0 ; HighCyl = 79

By using a HighCyl value of 79 we can create an 880k RAD: but you need at least TWO megabytes of RAM.

Here are some tips on setting up this 'mountlist' file to suit your system:

You can either edit the MyMountlist file in the RADical drawer, or edit the Devs:Mountlist file if you have one (Workbench 2.0). If you have Workbench 2.1 or later, then you can edit the file RAD in Devs:DosDrivers.

IF YOU HAVE SOME FAST RAM:

Make BufMemType equal to 5.
Set HighCyl appropriately.

IF YOU HAVE ONLY CHIP RAM (NO RAM EXPANSION):

Make BufMemType equal to 3.
Set HighCyl appropriately.
Increasing the value of Buffers will actually slow down the Ram Disk.

Suggested HighCyl Values:

Fast RAM Installed	HighCyl Value	Max Ram Disk Size
0	15	128k
512k	31	256k
1Mb	63-95	512k-768k
2Mb	127-191	1Mb-1.5Mb
4Mb	255-383	2Mb-3Mb
8Mb	Anything less than 1024	

RAD: The good points

RAD will recover after a 'Guru' and anything saved to it will still be there.
Access times are very fast indeed because you are saving to and loading from RAM.

RAD: The bad points

Some virus checkers may get upset if they find a RAD in memory because the CoolCapture Vectors will have been changed. Most viruses do this too! Note though, a RAD is NOT a virus and can do no harm whatsoever.
On old A500s with more than 1Mb of RAM, RADs do NOT recover! This was a bug on the A500/2000 series computers, now sorted.
They use up RAM even if they are empty

Setting HighCyl

HighCyl determines the maximum size of the recoverable RAM disk. It defines the number of tracks there are in the disk. Each track contains sixteen 512 byte blocks (or 8k of information). Changing HighCyl and rebooting will cause a fresh (empty) recoverable RAM disk to be created.

It is better to run out of space on the recoverable RAM Disk than to run out of memory. That is, don't set HighCyl to make a disk larger than your total amount of memory. (This was the problem with the standard A500+ mountlist!)

Every time you reboot, the RAD will still be there plus whatever you have put into it. Getting rid of it and regaining your lost memory is simple, just enter the SHELL and type:

remrad FORCE

The icon will remain on screen and you will not be able to use the RAD disk, but your memory will have been returned to you. The next time you reboot, RAD will have gone.

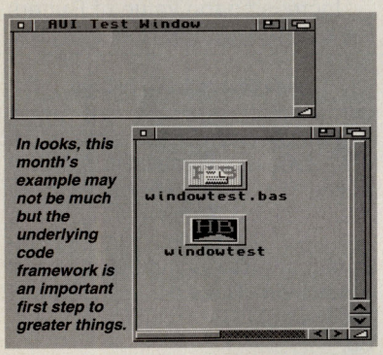
Have a go at altering the RADical script and get it to create a more useful RAD disk. Don't forget to send the results in to us so that we can all benefit. ***AUI***

SORTING HISOFT BASIC AND GADTOOLS

The Windows Connection. Paul Overaa describes the tricks required to make the combination work.

If you have had difficulty up until now in trying to get those elusive 'gadtool style' gadgets into your Hisoft Basic windows then help is (at last) at hand.

There are no high-level mechanisms available from within HiSoft Basic for collecting and using Intuition messages related to events such as gadget use. The only support provided for gadgets is an 'on close' statement used to detect use of a window's close gadget. Nevertheless gadgets can be used from within HiSoft Basic programs although it is necessary to move outside of the core language statements in order both set to up the gadgets and handle their messages.



In looks, this month's example may not be much but the underlying code framework is an important first step to greater things.

One important difference, in the general arrangements is that underlying Intuition routines, such as OpenWindowTagList(), need to be used for window opening in order that the appropriate IntuiMessage flags (which tell Intuition which types of messages need to be sent to a window) can be set up.

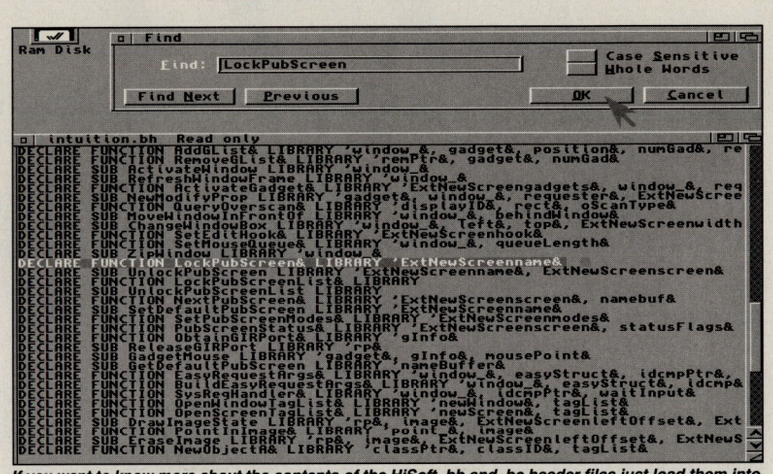
The function is easy enough to use although one minor complication occurs with the Workbench or other public screens due to the fact that they need to be temporarily locked whilst a window is opened. This is because a user (or other program) might try and close the screen while your program was in the middle of opening its window. An 'unlocking' function is also available and you'll be able to get details of how these functions are used from the Workbench screen-based example code you will find on this month's SuperDisk.

To use OpenWindowTagList() it is necessary to set up some tag list data describing the physical characteristics of the window. A lot of the available tag identities have fairly obvious names. The WA_Min/Max type tags, for example, are used to provide minimum/maximum window co-ordinate values and WA_PubScreen is used to supply the address of the screen being used.

WA_Left, WA_Top, WA_Width, WA_Height and WA_Title are used to provide details of the size and title of the window. WA_DragBar asks Intuition to place a drag bar on the window if the data item field is set to TRUE&. WA_DepthGadget, WA_CloseGadget and WA_SizeGadget gadget tags (which can be used to indicate that these system gadgets are wanted in the window) behave in a similar fashion - just set the tag data part to TRUE& for the items you want. WA_IDCMP is a particularly important tag because Intuition uses this to decide what types of messages are going to be sent to the window's message port.

Perspective

If you are new to this type of coding then there is no doubt that gadget creation and event handling will seem like a nightmare - and even the code operations needed to open a window can seem complicated on first encounter! What we need to do therefore is take things slowly and the task this month is simply that of opening a window using the direct Intuition calls. To do this we are talking about a framework which looks like this.



If you want to know more about the contents of the HiSoft .bh and .bc header files just load them into the editor and look at them.

```
Lock the screen
  If a valid screen lock is obtained
  then
    Set up a tag list for the window
    Try and open the window
    Free the screen lock
  end if
```

and, if you bear this framework in mind, it should help to make the example code that much easier to understand.

Listing 1 shows my OpenWin() routine from this month's example and you'll see that the main program fragment for opening and closing the window looks like this:

```
 g_window_p&=OpenWin&({- window parameters-})

   IF NOT g_window_p&=NULL&
   THEN
     {-do something now window is open-}

 CALL CloseWindow(g_window_p&)
END IF
```

For structure that, as you will doubtless agree, neither of these fragments are particularly difficult to understand but together they do form the backbone of this months code. This month's example may be nothing to look at, just a plain window that vanishes after you hit the close gadget. But when you look at the example code on disk you will find not only the tag based window opening code I have discussed but a message collection loop that will allow the relatively easy addition and handling of gadtool gadgets and menus. Message collection is another subject that is on the agenda for these discussions and is the topic for the future. ***AUI***

```
FUNCTION
OpenWin&(x&,y&,w&,h&,w_min&,w_max&,h_min&,h_max&,t$)

STATIC workbench_p&
STATIC window_p&
STATIC window_tags&(36)
DIM window_tags&(36)

workbench_p&=LockPubScreen&(NULL&)

IF NOT (workbench_p&=NULL&) THEN

  TAGLIST VARPTR (window_tags&(0)),_
   WA_Title&,t$,_
   WA_Left&,x&,_ 'you'll find various other tags used in the source
   TAG_END&

  window_p&=OpenWindowTagList&(NULL&,VARPTR(window_tags&(0)))

 CALL UnlockPubScreen(NULL&,workbench_p&)

END IF

OpenWin&=window_p&

END FUNCTION
```

Listing 1: Window opening low-level Intuition style!

Want to get connected?



....AMITCP v4.5 DIALUP
[NEW!! FULL TCP CLIENT]

....VOYAGER-NG v2.1 NEW!
[EXCLUSIVE!! NEW WWW CLIENT]

....MICRODOT-II NEW!
[AMAZING NEW MAIL/NEWS CLIENT]

....AmFTP
[INDUSTRY STANDARD FTP CLIENT]

....AmIRC
[INDUSTRY STANDARD IRC CLIENT]

....AmTelnet NEW!
[TELNET CLIENT - AMFTP AUTHOR!]

....AmTalk NEW!
[INTERNET CHAT CLIENT]

....AmFinger NEW!
[FINGER CLIENT]

....AmTerm NEW!
[NEW COMMS/BBS CLIENT]

& MUI 3.8 (Shareware)

STOP PRESS!!

Voyager Supports FRAMES!



New for Voyager-NG v2.1

HTML 3.2 specifications - tables and full frames (scrolling and floating as shown) now supported! Internal Image Decoder - fast internal GIF/JPG decoding, GIF Anims, 24BIT CyberGFX support! Graphical Printing - print web pages as they are shown! Enhanced Features - POP-UP menus, MIME GUI, extra security, FULL FTP module and much more!



COMPLETE Internet Software

Wanting to get onto the Internet? Already connected, but frustrated with your software? NetConnect is all you need to get connected to the Internet and contains a suite of seven **commercially licensed** Internet applications. You won't find an interface as easy-to-use as NetConnect's! We have spoken at length to so many of our customers about getting onto the Internet - we know exactly what you need and what you want. You want software you can use - not shareware but commercial software, you want the hassle taken out of the installation and you want a suite of the very best Amiga Internet software. Indeed, to make NetConnect the very best we organised programmers to enhance their software - so you get previously non-released software. NetConnect contains a full TCP client worth over £35 in itself! You can save masses of £££'s from buying NetConnect as there is no need to licence the Internet software - full versions all licenced for you! Remember you are also entitled to minor upgrades/fixes as a registered user!!





Buy Your Vaporware Products Direct From Active!

VAPORWARE

NETCONNECT AND VAPORWARE PRICES

NetConnect CD Version or 3.5" Floppy Disks	£ 59.95
33.6 Voice Modem	£109.95
33.6 Non-Voice Modem	£ 99.95
33.6 Voice Modem & NetConnect	£139.95
Voyager Next Generation (v2.10)	£ 20.00
Microdot-II (call for release date and to confirm price)	£ 20.00
AmIRC v1.32	£ 19.00
AmFTP v1.72	£ 19.00
AmTalk v1.2	£ 12.00
AmTelnet v1.0 + AmTerm v1.0	£ 18.00
MUI 3.8 (when you buy Vapor products or NetConnect)	£ 12.00

- *5% Discount when 2-4 Vapor products are bought, 10% Discount for 5+*
- *Note that the Vaporware products are e-mail only but can be sent on floppy for a surcharge of £2.00 per product.*

Quality 33.6 Voice and Non-Voice Data/Fax Modems



- 33600 bps DATA/FAX modem - true v34. Throughput to 115, 200 BPS via V.42 bis data compression
- Group 1, 2 & 3 send/receive FAX (14.4)
- Voice CommandsDSVD upgradeable (by software) *voice only
- Auto Answer *voice only
- Full Duplex Speaker *voice only
- Call Discrimination *voice only
- Fax on demand *voice only
- Simultaneous voice and data (S.V.D.) *voice only
- Message playback via sound card / speaker or headset *voice only
- Auto mode detection allows modem to connect with a modem that is configured for differing connection modes
- Extended AT command set
- Upgradable ROM chip (safeguarding against future specifications)
- BT and CE Approved
- Amiga 25pin and Surf Squirrel/PC 9pin serial cable included
- With Headphones and Microphone *voice only
- Full "get started" documentation
- 5 year warranty - also undergone rigorous Amiga tests

Save over £23 with Enterprise!

Buy NetConnect and get FREE connection to Enterprise (worth £20 ex. VAT or £23.80 inc. VAT)!

Send your order to:
Active Software, PO Box 151,
Darlington, County Durham,
DL3 8YT, ENGLAND.

☎ 01325 352260

active@enterprise.net

DELTA Access VISA SWITCH

Postage and Delivery

CD's	- 50p per CD for UK delivery - £1 per CD for EU delivery - £2 per CD World delivery
Modem	- £3 for 2-3 day delivery - £4 for next day delivery - £15 for Saturday delivery

Make cheques/P.O.'s payable to Active Software and send to the address listed opposite. We can accept credit or debit card orders. For any additional information call us ASAP!

Supported by ISP's Worldwide

NetConnect allows you to select your country then select an ISP (easy!) - we have about 160 ISP's listed from 29 different countries (58 from the UK!). Nearly 100% of the WORLD is covered for any user who wants to connect to the Internet!

FREE FREE FREE FREE

GAMES CHEATS 1.4 EMULATOR ON ALL ORDERS

UNDERGROUND P.D.

LIBRARY DISK POST & PACK ON ALL ORDERS

PLATFORM GAMES
- ☐ 1684 THE BIRDIES
- ☐ 1296 HARRY HADDOCK
- ☐ 1330 CAPTAIN BONUS
- ☐ 1461 CHARLIE COOL
- ☐ 1701 ITS HIDEOUS
- ☐ 1553 LANCE-O-LOTS
- ☐ 1878 JUMPMAN DELUXE

SPACE BLASTERS
- ☐ 911 SOLO ASSAULT
- ☐ 498 THE LAST REFUGE
- ☐ 596 GORF INVADERS
- ☐ 343 CYBERNETICS
- ☐ 1083 DE-GALAGA 2.5
- ☐ 1434 SPACE BLASTER
- ☐ 1706 THE ASTRO KID
- ☐ 1904 CREEP CRAWLIES
- ☐ 1855 A12 SPEEDBREAK

ARCADE GAMES
- ☐ 555 HUGO V2 5 DISK
- ☐ 1338 STRIKE COMMAND
- ☐ 1451 NIBLER NIBLET
- ☐ 1448 MORPHING GAME
- ☐ 1445 10 C.W. GAMES
- ☐ 1500 24 U.P.D. GAMES
- ☐ 1477 BOMB MANIACS
- ☐ 1523 A12 GLADIATORS
- ☐ 1502 SNEECH V1.5
- ☐ 1603 A1200 BEASTIES
- ☐ 1880 A12 SLIPSTREAM
- ☐ 1925 DUNGEONS

P.D. VERSIONS
- ☐ 024 ELF & PP HAMMER
- ☐ 477 CADAVA-VENUS FLY
- ☐ 022 GODS-TI/MACHINE
- ☐ 026 ROBOCOP-T/RECALL
- ☐ 815 LEMMINGS PACK
- ☐ 023 RICK DANGEROUS
- ☐ 472 TETRIS GAMEBOY
- ☐ 027 CHUCK ROCK-ICE
- ☐ 14457 TI-FIGHTER
- ☐ 1501 A12 PENGUINS
- ☐ 1702 S.W.O.S. MOON
- ☐ 1703 S.W.O.S. EARTH
- ☐ 1778 PINBALL PANTS

COMBAT GAMES
- ☐ 941 FATAL BLOWS
- ☐ 938 MARTIAL SPIRIT
- ☐ 1238 WEAPON MASTER
- ☐ 1428 CYBERFIGHT 3 DSK
- ☐ 1548 FIGHT A1200

CLASSIC GAMES
- ☐ 011 ASTEROIDS
- ☐ 693 MISSILE COMMAND
- ☐ 778 OVERLANDER
- ☐ 692 SPACE INVADERS
- ☐ 308 DONKEY KONG

DRIVING GAMES
- ☐ 951 FLAMING ENGINES
- ☐ 469 THE ROAD TO HELL
- ☐ 811 CAR MANIACS
- ☐ 1417 FENDERS V2
- ☐ 1466 KNOCK OUT CARS
- ☐ 1642 A12 EXT-RACING
- ☐ 1893 BOSCAR RACING
- ☐ 974 F1 EDITOR 96/7

SIMULATORS
- ☐ 926 HELICOPTER
- ☐ 332 SEALANCE-SUB
- ☐ 333 BATTLE CARS V2
- ☐ 1273 A12 TRAIN DRIVER
- ☐ 1455 BATTLE ZONES

SPORT GAMES
- ☐ 1014 CRAZY GOLF
- ☐ 822 CRICKET AMOS V2
- ☐ 630 TEN PIN BOWLING
- ☐ 1171 C ANGLER 2DSK
- ☐ 1373 ICE HOCKEY
- ☐ 1251 TOUR TENNIS
- ☐ 1329 PRO BASE BALL
- ☐ 1465 2 DSK A12 TENNIS
- ☐ 1317 A12 GONE FISHIN
- ☐ 1700 GOLF 9 HOLES
- ☐ 1669 TABLE TENNIS
- ☐ 1630 INTER CRICKET

HINTS & CHEATS
- ☐ 821 PASSWORD MANIA
- ☐ 820 MEGACHEATS
- ☐ 681 SIERRA SOLUTIONS
- ☐ 1118 UP TO DATE V1
- ☐ 1358 NEW SOLUTIONS
- ☐ 1462 SOLUTIONS V2
- ☐ 1653 SOLUTIONS V3

OVER 18 GAMES
- ☐ 101 TERROR LINER V1
- ☐ 1081 ADULT TETRIS
- ☐ 1145 A12 NUMBERS
- ☐ 1307 TERROR LINER V3
- ☐ 1335 ADULT DROIDS
- ☐ 1001 2 DSK ADVENT V2
- ☐ 1533 DRAGONS BALL
- ☐ 1517 X BOMBER GAME
- ☐ 1654 LEGO NOT 1.3
- ☐ 1906 BLIND DATE

TETRIS-COLUMNS
- ☐ 294 KLACK-TRIS COLMS
- ☐ 107 TWIN-TRIS TETRIS
- ☐ 293 DR-MARIO COLMS
- ☐ 597 TETRIS PRO
- ☐ 1602 SUPER-FOUL-EGG
- ☐ 1672 PILL-MANIA
- ☐ 1919 VANILLA TETRIS
- ☐ 1866 WALL STONES

PAC-MAN GAMES
- ☐ 230 SUPER PAC MAN
- ☐ 102 LADYBUG PAC MAN
- ☐ 252 YUM YUM PAC MAN
- ☐ 1096 A12 PUC-MAN
- ☐ 1138 A12 CYBER-MAN
- ☐ 397 DELUXE PACMAN
- ☐ 1648 BOBS LEMON

BREAK-OUT & PONG
- ☐ 003 MEGABALL V1
- ☐ 459 MEGABALL V2
- ☐ 007 BATTLE PONG
- ☐ 421 REBOUNDER PONG
- ☐ 559 MEGABALL V3
- ☐ 1704 BORIS BALLS
- ☐ 1924 OUTSIDE BREAKS

BOULDERDASH GAMES
- ☐ 121 MARATHON MINES
- ☐ 1527 ICE MINES PRO
- ☐ 1580 EXPERT MINE V2
- ☐ 1574 BUG MINE V2
- ☐ 1583 STYX MINE V2
- ☐ 1584 UNDERMINE V7
- ☐ 1586 DEN MINE V6
- ☐ 1595 NEW MINES V1
- ☐ 1573 GOLD MINE V2
- ☐ 1892 SPACE MINES

PUB-CLUB GAMES
- ☐ 222 FRUIT MACHINE
- ☐ 932 MEGA FRUITS
- ☐ 375 CARDS SOLITAIRE
- ☐ 1073 CARD PACK
- ☐ 1112 A12 EX CARDS
- ☐ 1246 CRIBBAGE CARDS
- ☐ 1304 CHECKERS V2
- ☐ 598 PIN BALL FLIP
- ☐ 1362 PUB DARTS
- ☐ 1450 SNOOKER NIGHT
- ☐ 560 WORLD DARTS

BOARD GAMES
- ☐ 032 MONOPOLY USA
- ☐ 631 SCRABBLE
- ☐ 296 RISK (GLOBE-WAR)
- ☐ 472 CHESS GAMES
- ☐ 910 NEW MONOPOLY
- ☐ 1433 LIFTS & LADDERS
- ☐ 1922 LOGICS

ADVENTURE GAMES
- ☐ 116 STAR TREK 2 DISK
- ☐ 297 NEIGHBOURS 2DISK
- ☐ 1425 ELDRITCH NO 1.3
- ☐ 1503 4 DSK ANGST A12
- ☐ 1711 A12 INGENUOUS
- ☐ 1894 TIMERUNNER V2
- ☐ 1913 SEVEN REALMS

STRATEGY GAMES
- ☐ 876 GLOBAL NUKE WAR
- ☐ 1185 A12 CRITICAL HIT
- ☐ 1374 A12 MARATHON
- ☐ 1347 BATTLE AT SEA
- ☐ 1431 U.F.O. UNCLOTHED
- ☐ 1547 SOLO STAR TREK
- ☐ 1671 BREED 1996

PUZZLER GAMES
- ☐ 953 CHANEQUE 2 DISK
- ☐ 1066 MINDBENDERS
- ☐ 859 10 PUZZLERS
- ☐ 1463 FULL SCHNEBITZ
- ☐ 1550 PUZZLE PITS V2
- ☐ 1546 X BALL PUZZLE

MANAGER GAMES
- ☐ 868 THE SUPER LEAGUE
- ☐ 876 SCOTTISH LEAGUE
- ☐ 310 TOP OF THE LEAGUE
- ☐ 404 METROS MANAGER
- ☐ 321 AIRPORT
- ☐ 1699 PREMIERE PICS
- ☐ 1771 MICRO MART V3

QUIZ GAMES
- ☐ 716 POP MUSIC QUIZ
- ☐ 309 THE QUIZ MASTER
- ☐ 462 WHEEL OF FORTUNE
- ☐ 991 2DSK STAR TREK
- ☐ 1683 HOLLYWOOD TRIV
- ☐ 1670 A12 DEATH ROW

LOGIC GAMES
- ☐ 119 DRAGON'S TILES
- ☐ 112 DRAGON'S CAVE
- ☐ 323 OXYD LOGIC
- ☐ 1037 MARBLES GAME
- ☐ 1035 ATOMIC GAME
- ☐ 1369 BOOMIN'ECK!
- ☐ 1412 OOZE! NOT 1.3
- ☐ 1678 TILE MANIA

AMIGA LEISURE
- ☐ 205 AMIGA PUNTER
- ☐ 228 PERM CHECKER
- ☐ 886 LEAGUE EDITOR
- ☐ 1210 LOTTO LUNACY
- ☐ 1438 AGENE VERSION 5
- ☐ 1557 THE ORACLE 2 DK

A1200 MEGADEMOS
- ☐ 11993 MEGA LEMMINGS
- ☐ 1204 TAZ INTROS
- ☐ 1220 MEGA JAMMIN
- ☐ 1302 DUNGEONICS
- ☐ 1285 MEGA INTROS V2
- ☐ 1274 2DSK CONTROL
- ☐ 1271 PIXEL STORMS
- ☐ 1439 BLOWING BRAIN
- ☐ 1415 MYSTIC ILEX
- ☐ 1414 2 DISK DOVE
- ☐ 1544 OXYGENE V3 2 DK

AMIGA MEGADEMOS
- ☐ 460 TEKNO RAVE
- ☐ 430 2 DISK DATA X
- ☐ 262 2 DISK PREDATORS
- ☐ 1120 2DSK QUEEN V2
- ☐ 1685 JADE 2 DISKS
- ☐ 1861 2 DISK BATMAN

A1200 SLIDE SHOWS
- ☐ 740 4 DISK MANGA
- ☐ 1040 3 DISK GLAMOUR
- ☐ 1108 5DSK STAR TREK
- ☐ 1436 2 DSK P ANDERSON

AMIGA SLIDE SHOWS
- ☐ 704 REVELATIONS
- ☐ 061 PAT NAGEL'S GIRLS
- ☐ 936 AVIATION HISTORY
- ☐ 1107 TO BOLDLY GO

ARTWORK PACKAGE
- ☐ 465 KIDS PAINT
- ☐ 664 FUSION PAINT
- ☐ 063 ULTRAPAINT
- ☐ 349 SPECTRA COLOUR
- ☐ 748 ILLUSION PAINT
- ☐ 1707 PERFECT PAINT
- ☐ 1760 JNR PICASSO
- ☐ 187 ANIMATE STUDIO
- ☐ 1843 FREE PAINT
- ☐ 1786 A12 ANI STUDIO

ARTWORK PROGRAMS
- ☐ 071 GRAPHICS CON KIT
- ☐ 070 GRAPHIC UTILS
- ☐ 133 FRAC LAND BUILD
- ☐ 1299 A12 MAGNIFI-CAD
- ☐ 1460 A-Z PAINT PAD

ANIMATIONS
- ☐ 080 VIRTUAL WORLDS
- ☐ 084 PUGGS IN SPACE
- ☐ 233 COOL COUGAR
- ☐ 651 FAIRLIGHT 242
- ☐ 831 RED DWARF
- ☐ 475 BAIT MASKING
- ☐ 865 TAROT MASTER 2 DISK
- ☐ 271 NEWTEK V2 2 DISK
- ☐ 347 NEWTEK V3 2 DISK
- ☐ 1447 2 DSK JAP MANGA
- ☐ 1449 BATMAN V JOKER

AMIGA VIDEO
- ☐ 329 VIDEO INSCRIPT
- ☐ 790 VIDEOTRACKER 5 DISK
- ☐ 148 S - MOOVIE
- ☐ 1309 2DSK BELL PAINT

MUSIC MAKERS
- ☐ 220 FUNK KEYBOARDS
- ☐ 431 RAVE KEYBOARDS
- ☐ 202 MED V3.2
- ☐ 729 DRUM MACHINE
- ☐ 787 SONIC DRUM KIT
- ☐ 866 OCTAMED TUTOR
- ☐ 738 OCTAMED V2
- ☐ 136 THE ART OF MED
- ☐ 192 THE COMPOSER
- ☐ 618 MUSIC DATABASE
- ☐ 981 AUDIO ENGINEER
- ☐ 661 4 DSK MED-WORKS
- ☐ 1099 QUADRAPLAYER
- ☐ 1435 PRO-TRACKER 2.3

CLASSIC - POP
- ☐ 201 PIANO CLASSICS
- ☐ 234 VIVALDI 2 DISK
- ☐ 342 AMIGA-DEUS
- ☐ 213 DIGI CONCERT V2
- ☐ 620 BAGPIPE MUSIC
- ☐ 248 EXPRESSION V2
- ☐ 1088 MELLOW CD MIX
- ☐ 1147 7 DSK JUKE BOX
- ☐ 1759 GUITAR BLUES

SAMPLES - MODS
- ☐ 660 KORG 01W 8 DISK
- ☐ 218 HOUSE 2 DISK
- ☐ 647 SOUND FX 3 DISK
- ☐ 619 DRUMS 2 DISK
- ☐ 1666 SAMPLES 6 DISK
- ☐ 1850 ANSWER BACK V1
- ☐ 1828 WORMS SAMPLES

AMIGA EMULATION
- ☐ 423 2 DISK SPECTRUM
- ☐ 889 PC EM 2 DISK
- ☐ 300 DOWN TO 1.3
- ☐ 955 AGA V3 TO 1.3
- ☐ 414 V2 UP TO V3
- ☐ 312 1.3 UP TO 2.0

DISK COPIERS
- ☐ 158 X.COPY PRO
- ☐ 357 COPY AND CRACK
- ☐ 325 LOCKPICKER V2
- ☐ 1667 COPY & CRACK V2
- ☐ 1896 COPY & CRACK 3

HARD DRIVERS
- ☐ 779 W/B 3 INSTAL
- ☐ 780 W/B 2 INSTAL
- ☐ 621 H/D STACKER
- ☐ 1141 GAME INSTALL V3
- ☐ 1199 GAMES INSTALL V4
- ☐ 1692 A-BACKUP VOLS
- ☐ 1674 C.D. ATAPI
- ☐ 1775 M.U.I 3.6 2 DSK

PRINTING
- ☐ 100 PRINTER DRIVERS
- ☐ 048 PRINTING STUDIO
- ☐ 345 BANNER MAKER
- ☐ 057 TEXT ENGINE V4
- ☐ 394 INVOICE PRINT
- ☐ 749 FORM PRINTER
- ☐ 243 AWARDMAKER 4DSK
- ☐ 1658 CARD & LABELLER
- ☐ 1565 CARTOON STUDIO
- ☐ 1842 PRINT MASTER
- ☐ 1782 TEXT CRAFT

AMIGA BUSINESS
- ☐ 832 DATABASES 2 DISK
- ☐ 092 ACCOUNT MASTER
- ☐ 470 LITTLE OFFICE
- ☐ 244 SPREADSHEET
- ☐ 1464 DIARY 2000
- ☐ 1758 DAILY LIVING

COLOUR CLIP ART
- ☐ 637 6 DISK COL/BRUSH
- ☐ 633 7 DISK CLIP ART
- ☐ 901 9 DISK WORLD MAP
- ☐ 1060 3 DSK LION KING

MONO CLIP ART
- ☐ 172 15 DISK PORTFOLIO
- ☐ 558 7 DISK CLIP ART

AMIGA MODEM
- ☐ 413 N. COMMS V3
- ☐ 079 OPTICOMMS V2
- ☐ 690 TERM 2 DISK
- ☐ 801 DMS PRO
- ☐ 1562 EASY D.M.S.

PROGRAMMERS
- ☐ 288 A-BASIC TUTOR
- ☐ 306 UNDERSTAND AMOS
- ☐ 722 TONS OF AMOS
- ☐ 1067 DATATYPES
- ☐ 1479 EURO CAN-DO

DO IT YOURSELF
- ☐ 239 SLIDESHOW MAKER
- ☐ 381 ADVENTURE MAKER
- ☐ 808 MAKE A DISK
- ☐ 242 MENU MAKER
- ☐ 585 2 DISK PARNET
- ☐ 1032 MAX B.B.S. KIT
- ☐ 1560 INTROS MAKER
- ☐ 1903 DISK MAKER V2

VIRUS CONTROL
- ☐ 506 A1200 VIRUS
- ☐ 160 M.V.K. PLUS
- ☐ 993 VIRUS 2
- ☐ 1183 2DSK VIRUS DATA

AMIGA UTILITIES
- ☐ 612 4 DISK TOOL-KIT I
- ☐ 1030 A12 DIONIC TOOLS
- ☐ 1076 AGA TOOL-BOX
- ☐ 1181 M.U.I. NOT 1.3
- ☐ 1342 ENCYPT UTILLS
- ☐ 1343 SPEED UTILLS

DISK & SYSTEM
- ☐ 166 SYSTEM TESTER
- ☐ 467 FILE UNDELETE
- ☐ 194 DISK OPTIMISE
- ☐ 356 ENGINEER'S KIT
- ☐ 245 FIX DISK
- ☐ 168 HARDWARE MANUAL
- ☐ 1881 HARDWARE MODS

AMIGA EDUCATION
- ☐ 766 GEOGRAPHY
- ☐ 532 MATHS 5 DISK
- ☐ 644 ENGLISH 4 DISK
- ☐ 486 LANGUAGES 4 DISK
- ☐ 270 PLANETS 6 DISK
- ☐ 304 ENGINES 5 DISK
- ☐ 059 AMIGA TUTORIAL
- ☐ 1123 WORLD HISTORY
- ☐ 1361 2 DISK INTERNET
- ☐ 1345 2 DSK BAT-B-BRIT
- ☐ 1311 2 DISK TITANIC
- ☐ 1825 C.L.I TUTOR
- ☐ 1918 SPEAK KLINGON

DISK COST £1.50 EACH, NO MINIMUM ORDER, ALL VIRUS FREE AND USER FRIENDLY
All Games are on 1 disk and run on all Amigas unless otherwise stated.
PICK AN EXTRA DISK FOR FREE WITH EVERY EIGHT DISKS YOU PURCHASE

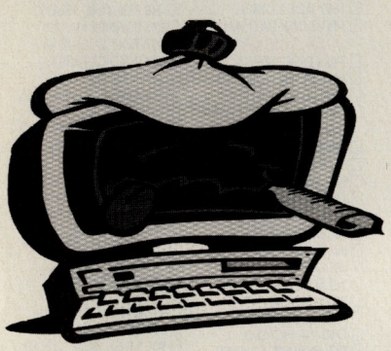
UNDERGROUND P.D., 54 CARMANIA CLOSE, SHOEBURYNESS, ESSEX SS3 9YZ. Tel: 01702 295887

Name: ..... Amiga Model: .....

Address: .....

..... Postcode: .....

The Amiga Answer Machine...



Once again *AUI's* Guru of the Technowaves, Andy "That's an interesting problem, I suggest you use the fire extinguisher before checking the power supply" Eskelson, confronts the problems and the puzzlement of Amiga users around the world.

Answer Types

APPS	Programs etc]
VIDEO	Video related problems
COMMS	Communications
PROG	Programming
OS	Operating System
PRINT	Printer Problems
COVERDISK	Cover Disk problems
OTHER	For Anything Else

COMMS

Dear *AUI*,

I have rather a large problem that is driving me up the wall. First I will give you the set-up that I have:

An Amiga A1200 with an Apollo 1220+4Mb, a 540Mb hard drive, a Sony 2x CD-ROM, Citizen ABC printer, and a Dynamode 28800 modem. It is this last item that is causing me the hassle.

I have an account with Ireland-on-Line which is a PC and MAC-based Internet provider, by this I mean the software they give out are for these computers.

My main problem is that after starting Miami and getting online using AWeb I am finding the whole experience frustrating and slow. Either Miami will just shut me offline or I don't connect to any of the Websites that I try to contact.

I was online for a full 20 minutes just to get a page to read on Miami (242/6702 bytes). Now surely this isn't the speed I should expect.

I rang Online PD to see if they could help, but as long as the modem was working they didn't seem to care.

Ireland-on-Line were the same story, they have no-one who has experience in Amigas so I have more or less reached a dead-end. They have since told me to lower my modem speed in Miami to 9200, surely this isn't right since I've bought a 28800 modem!

On another note, I have connected to a few BBSs and there were no problems with speed or anything like that, so maybe my problem lies in the software configs in either Miami or AWeb. I have included both for you to look at, maybe they will help. I have included an addressed envelope and an international reply coupon for your quick answer as I am pretty helpless.

Joe Keane
Co. Mayo

Dear Joe,

I can't see anything wrong with your setups, so I think the problem may be more general. This may take a bit of sorting out, so perhaps you would care to e-mail via the special Answer's mailbox (andy@auimag.demon.co.uk) and we can bat this about until we find the cause.

Some general things to look out for:

Reduce the number of colours that you use on your Workbench, even if you have to go right down to 4 colours (Workbench standard). The screen display can steal time from other processes and this has been known to upset the serial port. So set the screen to four colours, both Workbench and AWeb if you are running that on its own screen, then try again. If this works, you can gradually increase the number of colours until you find the limit for your system.

This is the reason that you were told to lower your modem speed, a lower speed will give the system more time to respond. You can try that as a test if you wish.

Make sure that you are not running any oddball commodities, screen savers, Workbench enhancements, and so on. Boot up from as clean a system as possible and try your connection.

You have to be aware that downloads over the Net can vary. The maximum speed that you will get will be dependant on two factors. The first is the slowest comms link in the route to wherever you are connecting to, and the load on that site.

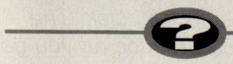
If you connect to a USA site in our afternoon that will be a busy time for the USA, as it will be their morning. So bear in mind



the time zone differences. There is no way to predict what the download speed will be at any given time. The Internet is a co-operating network, not one that is defined in absolute response times. It has no overall manager, and many of the systems that we hook into are used for real work as well as hosting the Net services. Time on these machines is given freely to anyone who logs on, it is only reasonable that the real work gets priority over the Net use. That is why it is important to log into dedicated Net sites, or watch the time zone carefully.

The next thing to do is to hook up to a Web page on Ireland-on-Line, this will be a local page to you and you should get full speed downloads, only depending on the load on Ireland-on-Line. If you do get full speed downloads from them, don't touch anything as the problem is external to you.

OTHER



Dear *AUI*,

I own one of the original Commodore Amiga A1200s which I have updated by the following additions: 425Mb Connor hard drive, which I have partitioned into the following - Workbench, Paint, DTP, and Work; a Hawk 2Mb RAM board accelerator with built in clock but no FPU; and an external floppy drive. I also have a Canon BJC4100 printer as well as a Citizen ABC Printer.

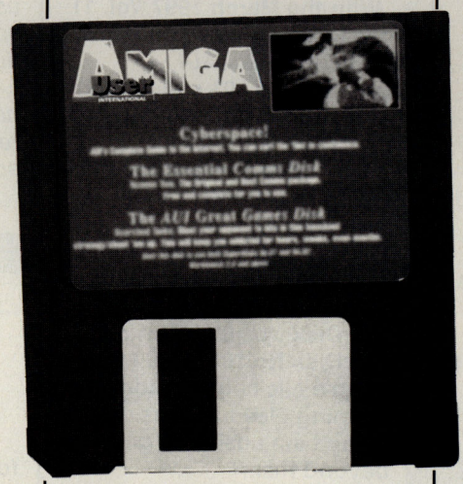
My questions to you are the following. I have had some programs that I have bought that, when I have tried to install them to my hard drive, the computer tells me that it can't find DH0:, yet other programs do not give me this message. So could you tell me how I can get over this problem as I cannot find any way to do this through my Workbench tools or my hard drive partitioning sequence?

Could you also tell me which CD-ROM is advisable to buy? Quad speed or other speeds? Considering I only have about £200 maximum to spend.

My next question is about the user-startup. I have tried to access it by using the Shell but I can't find anything there, and if I have tried to type some assign text it asks me to save it and if I do save it and then leave the Shell (which it will not let me do unless I save the file that has been changed) I then find another icon on my Workbench which says user-startup, so now I have two user-startups. If I try to access any of these two user startup icons by clicking on them all I get is a Window telling me to input a command.

Is this the right syntax for getting access to the user startup: Ed user-startup? I have only been into computing a few months so I am only learning, but I have bought your very informative *AUI* magazine since last August, which is about the time I got interested in computing and bought my Amiga A1200 second hand. My questions may seem trivial but believe me, if you can really help me with my problems I will be very happy and grateful.

John Robinson
Hartlepool

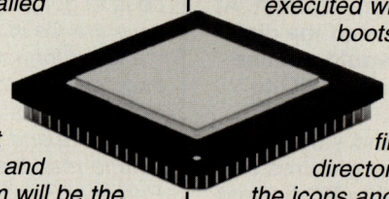


Dear John,

Welcome to the world of the Amiga. The Amiga is one of the most complex personal computers that you can buy, and fortunately one of the easiest to use.

DH0: is the standard name for the main hard drive partition. However it is very naughty of software to ASSUME that this will always be the case. What I suspect has happened is this:

The hard drive has a partition name as set up in HDtoolbox or whichever hard drive formatting program you use. When you format the partition via AmigaDos you can give it a Volume name, such as WORK: This is much the same as the floppy is generically DF0:, as opposed to the floppy which might be called "SuperDisk:"



Open a Shell and type Assign [RETURN], this will give you a list of logical assigns and right at the bottom will be the hardware devices. If you do not have a hardware device called DH0: that is the root cause of the problem. You could rename the partition, but please make sure that you back the drive up first, just in case. For many programs you could just add an assign to the system such as:

assign DH0: Work:

This will create a logical name which is really your Work: partition.

With your hardware query, you have a couple of options. The speed of the CD is not really all that important for general use. A quad speed will do everything that you need, apart from some very specialised video work. There are two methods of connecting the CD. The first is via a SCSI interface, and the second is via an IDE interface. If you want to go the SCSI route then you will need a SCSI interface such as the Squirrel. I would normally recommend that this is the better method.

The A1200 has an internal IDE interface and you might think that you can connect the drive to that. However, the IDE interface inside the A1200 is unbuffered and is not intended to drive anything more than about one inch of cable. Eyetech now supply a buffered IDE interface, and do a CD-ROM bundle with it. The question is, do you feel confident enough to open up your Amiga?

Your main problem with the startup sequences is that you are looking in the wrong place. For your own safety please make a backup copy of the user-startup and the startup-sequence, because if you mess up those two files you might have a real problem getting things back to normal.

These two files are in the S: directory. Get yourself a good directory utility and have a browse around and you will find them. The startup sequence is not a Icon driven file. It is essentially a list of Shell commands that are automatically executed when the Amiga boots up. When you run the ED command you created a new file in another directory. Just click on the icons and delete then in the normal way.

To find the startup files, open a shell and enter CD S:, then DIR, and you will see the files in the S: directory. You should find the startup files near the end of the list.

You can also browse through the disk directories by opening a drawer, and then selecting "show all files" from the Workbench menu. This will generate false icons for files that do not normally have icons. You could also use the view as text option rather than as icons, whichever method you prefer.

OTHER



Dear *AUI*,

My set up:

Second-hand A1200. Recently added extras: 8Mb RAM with 33MHz FPU in trap door; 1.2Gb internal hard drive. External, via IDE interface, 8 speed CDPlus; SyQuest EZ135. All of which is running perfectly and I am more than satisfied with the performance.

My problem:

Some 5 years ago a friend took some video stills with the then quite revolutionary Canon video stills camera (I cannot recall the model number). The results were later presented to me on a video film and I picked out a number of the stills I wished to keep for old time's sake.

The chosen stills were transferred at my request to a DD 3.5" and saved in the Atari .NEO format, now long gone. At the time I had in operation a 1Mb A500 plus GVP HD with 4Mb additional RAM and was hoping with the aid of CrossDos and DPaint III to reproduce the pictures and resave them on my system. At first I could not read the disk so asked if he would rename them from filename.NEO to filename.IFF.

This he did and still no luck. So he copied the pictures to another disk using PC Format filename.NEO. Again no luck on my part. Both formats worked on the Atari and, as I have stated, the Atari is no longer in his possession; my friend having changed allegiance to a PC.

My latest set-up has a number of viewing packages and they actually recognise the disks and display the file names, size, and format used, but when I try to view them, coloured lines appear but in an incoherent way that cannot be identified and only fill half the screen.

I have attempted to use DPaint to read the IFF format which the package appears to do offering to change the size of the display to match that of the recorded picture. I have tried a yes and a no to this question and each time a System Message appears "PC0:filename.IFF DPaint I/O problem.

What am I missing out? Is there a next stage? I was told some time ago that what I have done should have been enough. I would be grateful for any pointers.

Martin Davies
Biggin Hill

Dear Martin,

First point, are you a member of ICPUG? They meet at Biggin Hill library every so often.

You should have done enough by now, except for one very small thing. Changing the name of a file to .IFF does not change it into an IFF file. I suspect that the file is still in NEOchrome format, a colour image format peculiar to the Atari that only allowed for images with a maximum of 16 colours in a resolution of 320x200 pixels.

I've had a good look through the CDs that I have, and also on Aminet. I can't find anything relating to a NEOchrome format. The closest I came was PBMplus which has a GEM module.

The other thing that you can do is to get your friend to save the file in a more standard format if he has and can view the file on his PC. Save it as a GIF format file and you will be able to read that in with Personal Paint (on a SuperDisk some time ago). You can then save it out as an IFF and do whatever you want with it. You may well have viewers that can convert GIF files into IFF as well, also they may be able to do the same with JPEG (JPG) files which compress pictures better.

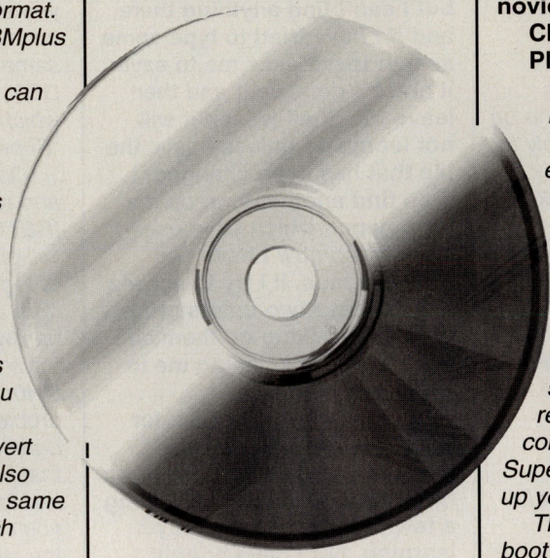
Remember that your A1200 can only read DD disks, not HD, so it would be best if you get your friend to format one of your DD disks to 720k on his PC, then transfer your pictures onto that disk.

COVERDISK

Dear *AUI*,

Would you please be so kind as to help a complete novice nay, complete numskull. Having now reached the age of retirement or even passed the sale by date.

I saved enough to purchase second hand a virtually un-used Commodore Amiga A1200 complete with a printer and Pen Pal word processor mainly as a hobby and also for the usefulness of being able to print various data sheets and speeches in connection with a society with which I am associated.



After much searching I have been able to master this side of the computer even though it may be a two finger exercise. However, I find there is an awful lot more to this computer and that I have only just scratched the surface.

To this end I have started to purchase AMIGA USER INTERNATIONAL.

With the March 1997 Vol. 11 No.3, there was, as you know, two SuperDisks. *AUI* SuperDisk No.101 states [boot this disk to install to floppy or hard drive. Requires Workbench 2.0 or above and at least 1Mb of RAM. Some software is AGA only].

The problem is that when I install Amiga Workbench Version 3.0 and then install SuperDisk No.101 I then get SuperDisk No.101 icon. I then double click on the icon and nothing else happens. Try as I may I am unable to get beyond this.

I am particularly interested in SuperDisk No.102's item TypeTutor for obvious reasons.

I have also managed to beg or scrounge SuperDisk No.34, dated March 1994, and have been unable to even get an icon.

I had started to purchase the Easy PC magazine but find this of no help to a complete beginner of an Amiga.

Could you please pass this letter to the technical dept. to see if help can be explained in simple terms of syllables of three letters to this complete novice.

Chic Lewis
Plymouth

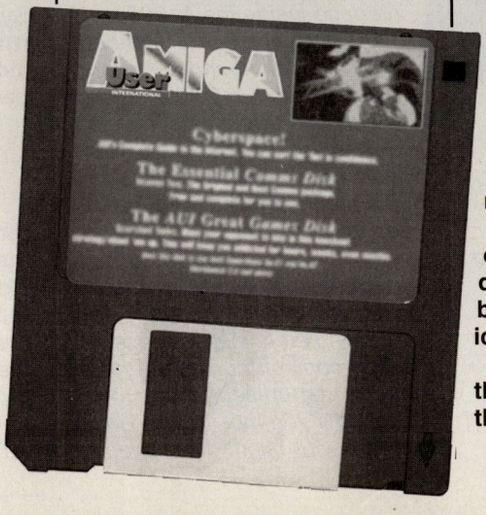
Dear Chic,

Yes, a simple beginners error. When a disk says BOOT this disk, it means put this disk in the drive and reset the Amiga, (the three fingered Control - Left-Amiga - Right-Amiga). The SuperDisk contains enough of the Workbench system to enable you to recreate all the floppies compressed onto the SuperDisk without you loading up your version of Workbench.

The disk that you are told to boot from is a standard Amiga Floppy, the second SuperDisk of the pair is formatted slightly differently, which allows us to get more on the disk. Booting from the first disk sets your system up to be able to read the diskspare format of the second disk. The disks that you produce as you go through the instructions, are normal Amiga disks.

Disk 34 is a standard Amiga disk. This was before we started using the new system. It should come up with a standard icon and installer icon.

I suspect that the disk you have been given has been reformatted or corrupted somehow.



OTHER

Dear *AUI*,

I have been an Amiga user for many years now. My current set-up is an A1200 with 8Mb of Fast RAM, a 1.3Gb HD, and 2 external DD. I am also considering an IDE CD-ROM, mainly the Ultra CD-ROM, but before I get to that I want to convert my A1200 into a tower but I am not willing to pay some poxy firm over £150 for a sub standard tower unit that will only house my add-ons.

The other thing that gets my

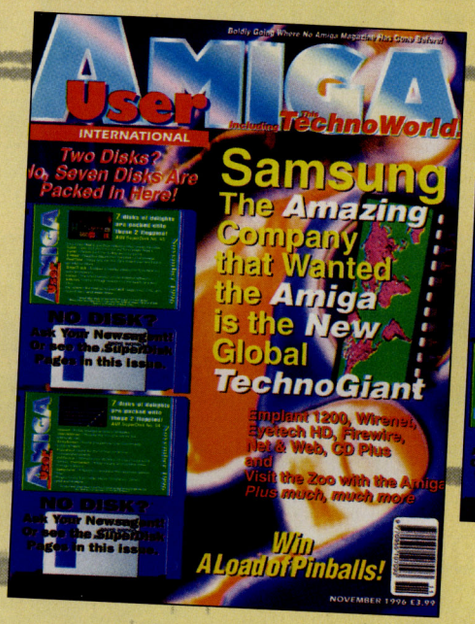
continued (73) ►



SUBSCRIBE!

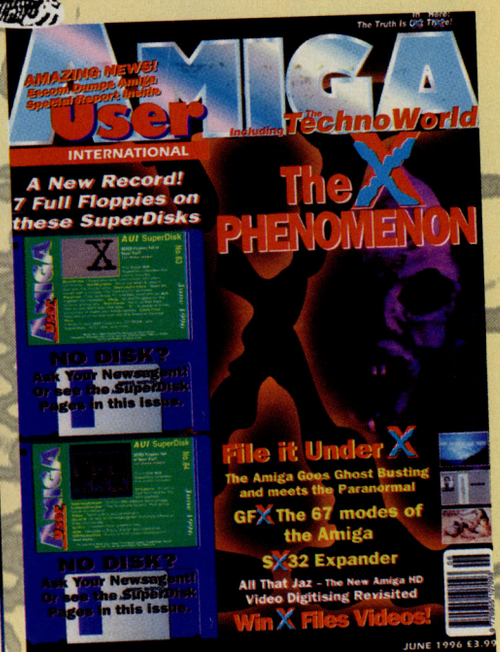
SAVE £6 AND NEVER MISS AN ISSUE











Pay just £19.50 for 6 issues of ***AUI*** and not only will you have your own personal copy delivered direct to your door, but you'll also save £6 on the normal cover price.

❑ **Please send me 6 issues of *AUI* for just £19.50***

Name .....

Address .....

.....

..... Postcode.....

❑ I enclose a cheque for £19.50 made payable to ***AUI*** Limited

❑ Please charge £19.50 to Visa/Access/Amex

CardNo..... Expiry date .....

Signature..... Date.....

*UK rate only. Europe: £29.90 Rest of World (Airmail):£48.10

Money Back Guarantee Should you decide, at any time, that you do not wish to receive further issues of ***AUI*** we will send you a full refund on the unexpired part of your subscription.

CREDIT CARD HOTLINE
01454 620070

Quote reference **HAU7** to make sure of the special subscription rate.

Please send coupon (photocopy welcome) and payment to: *AUI* Subscriptions, Bradley Pavilions, Bradley Stoke North, Bristol, BS12 OBQ

HAU7



The accumulation of years of invaluable Amiga knowledge is now at your fingertips with the ***AUI*** back issue service.

Great demand has seriously dented our supply of back issues. Undaunted, we have opened up the vaults and uncovered the Editor's secret stash.

Scan through the available issues and use the order form to secure your copies. Each issue includes the famous SuperDisks.

Issues cost £6 (UK) or £7 (overseas), including p&p. Make cheques payable to ***AUI*** Ltd. Postal orders are also accepted but, sorry, no credit card sales.

A complete index of the back issues, the SuperDisks and the *AUI* CD-ROMs, are to be found on this month's SuperDisks.

Back Issues Order Form

Rush me the following issues at £6 (UK) and £7 (overseas) each: .....

.....

.....

Rush me the following disks at £1.50 each (Minimum order £6. Outside UK add £2 P& P per order): .....

.....

Name .....

Address .....

..... Postcode .....

I enclose cheque or money order for £ ..... payable to ***AUI*** Ltd

Send your order to: Amiga User International, Unit 2, Utopia Village, 7 Chalcot Road, London NW1 8LX. *Please allow 21 days for delivery.*

◄ (70) continued

goat is that you can get a PC tower case for under £50 and that is with a 230W PSU. So here is my problem that I hope you can help me with. For me to buy the PC tower I need to know how to rewire the PC PSU with the cable from my existing A1200 PSU. So if you could print a diagram or instruction in the *AUI* mag as to do the above or include it on the SuperDisks I would be very grateful.

Also the other thing I was wondering about was this. I saw an advert for the Ateo PC keyboard interface and was wondering if you can use the external CD32 keyboard with it. Would it work with any PC tower unit?

Ateo PC keyboard interface suppliers: Ateo 01705 790211

P.S. I would phone them myself but some firms will tell you anything just to sell the product so I am asking you as you seem to know about most things Amiga.

S. Jamieson
Ayrshire

Dear S. Jamieson,

The ATEO interface is for a standard 5-pin DIN fitting. The CD32 uses a mini-DIN, so on that point the system is not compatible. Also the PC keyboard is not programmed in the same manner as the CD32 keyboard, so they are not compatible on that point as well.

If you don't talk to the firms yourself, how can you make such a sweeping statement as you have? I have personally found the opposite of what you suggest, and I have found Amiga suppliers to be very helpful, as you will see from other letters.

I can't give you a wiring chart because it will depend on the PSU that is supplied. Normally you will find that the output pin configuration is printed on the case of the power unit, but this is not always the case. It is always safer to measure the output with a meter, and to confirm the zero volt lines as well. If you don't know how to do this, don't try to connect up your Amiga yourself, as you will be asking for trouble.

Now let's take your tower case. PC cases have become very cheap of late, I can remember paying £90 for one quite a few years ago. For a basic expansion tower you will need a SCSI daisy chain cable, and some means of connecting this to your SCSI adapter, which normally means some sort of connector system. You may also need some mounting hardware, depending on your peripherals.

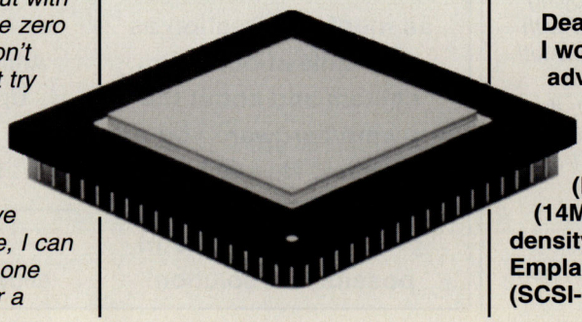
The main reason for putting the A1200 into a tower is to gain the expansion capability of the Zorro expansion bus. 'Real' A1200 towers can provide this, as well as some means of providing an external keyboard. Designing and building a Zorro expansion system that will work on the A1200 is not an easy task. It may only seem to be a PCB and a few connectors, but in the limited production runs that such units will generate, the costs are quite high. Also the firms producing such units are entitled to make a bit of profit. Judging the cost of any computer system against the PC is not a good idea, as the massive economies of scale that the PC market enjoys distort the overall picture. Amiga suppliers and owners can sometimes enjoy pickings from this market, such as large capacity RAM SIMMs which have crashed in price, so I suppose we should not knock it too much.

COVERDISK

Dear *AUI*,

After spending over an hour unpacking and formatting your two SuperDisks Nos.99/100, on loading any of the six disks I am getting a system request message - Please insert volume AMMD. I have read through your disk information on page 12 and can find no mention of this. My machine is an Amiga A1200 with a Hawk 4Mb RAM board.

John Wake
London



Dear John,

You are not getting an Amiga system message, this is an AMOS message. If you have a hard drive I expect that you have put AMMD somewhere that it automatically starts from, perhaps the startup drawer. If you press escape you will get to the normal Workbench screen. THEN read the readme files provided with AMMD which tell you how to overcome the problem.

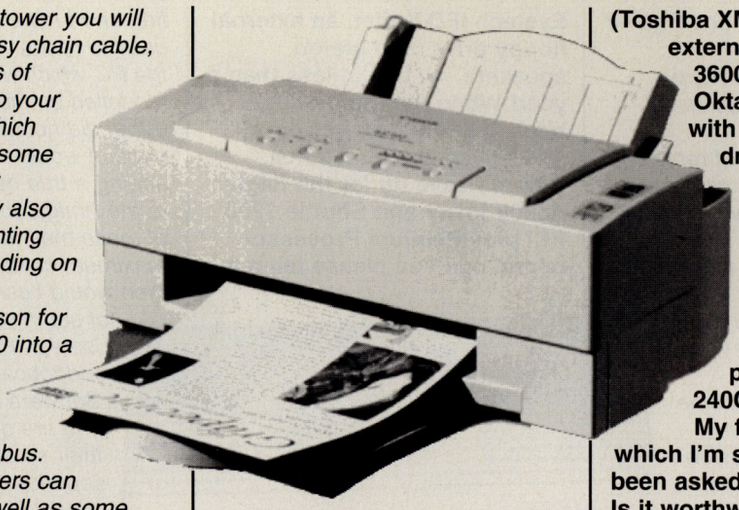
If you only have a floppy based system, boot up in the normal way and then put disk A in the drive and open it up. Click on the fix assigns icon then click on the game icon and it will run normally. The other thing that you can do is to rename the disk as AMMD, then it will boot from cold.

HARDWARE

Dear *AUI*,

I would like to ask for your advice (once again!!).

First of all here is my present system: Amiga A4000/40 @ 25MHz (Kickstart 3.0), 16Mb RAM (14Mb Fast), KCS dual high density external disk drives, Emplant expansion board (SCSI-1) with CD-ROM (Toshiba XM-5201 TA) and external Tandberg TDC 3600-07Y tape drive, Oktagon 2008 board with 1Gb SCSI-2 hard drive (Seagate), 214Mb IDE hard drive (DH0), Microvitec multisync monitor, Brother HL-8e laser printer, Epson colour stylus (500) printer, Citizen Swift 240C colour dot matrix.



My first question is one which I'm sure that you have been asked many times before. Is it worthwhile me upgrading to Kickstart 3.1?

My second question is that I've been offered a Warp Engine card running at 40MHz. This also has a SCSI interface and I seem to remember from past correspondence that you too have this board also.

Now is this just a case of removing my processor board and replacing it with the Warp Engine? Also, does this board come with software drivers for the processor and for the SCSI interface?

Will my existing SCSI devices go with this board, and does it have an external SCSI bus for the tape drive?

Could I just replace my existing processor for a faster one (say a 060) and replace the oscillator module at the same time provided I match the processor speed with the correct module i.e. 40MHz processor and 40MHz module?

I hope I have given you all the information that you need to answer my questions. If you need to get in touch with me you can do so either by phone or e-mail .

Many thanks in advance for the above and the many times I have contacted you in the past with my other problems.

I also enclose a S.A.E. for your reply if you so wish to use it.

Once again, many thanks for both your help and patience with my many problems in the past.

John Walker
Gateshead

Dear John,

I don't think that Kickstart 3.1 offers much above your current version. I've not bothered to

upgrade to 3.1, and I don't intend to.

Yes, I do have the Warp Engine, and I'm very pleased with it.

It is 'just a matter' of removing the Amiga board and plugging in the Warp. You do have to check a couple of jumpers. The docs are quite clear about this. However, getting the existing board out can be a bit fiddly, so just take your time and be careful.

The board should come with a disk of software, which is the Warp version of HDtoolbox, and a couple of other files.

The Warp should work with your SCSI devices, the only one I would be unsure of is the tapestreamer, as you know they can be a bit fickle. If push comes to shove, you can always leave your existing SCSI board in the A4000 and just use that for the tapestreamer.

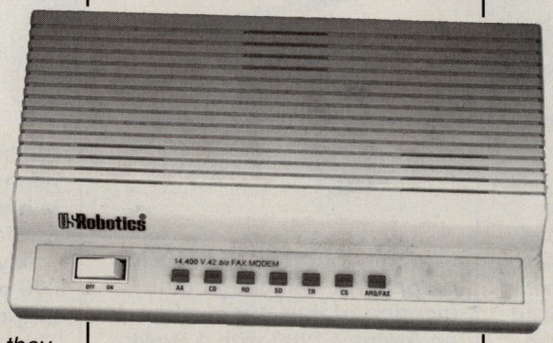
Looking at my old 040 unit, it does not seem as if it is designed to have a processor swap out, so I would not try that.

HARDWARE

Dear *AUI*,

Last time I wrote to you I was putting some pretty naive questions about my old A500, which you recommended I dump in favour of an A1200. I took your advice and PX'd it at Escom (R.I.P.). Now I have the A1200, Blizzard IV turbo with 50MHz FPU, 16Mb Fast RAM, a 1Gb Seagate IDE hard-drive and a quad speed Toshiba IDE CD-ROM running through an Eyetech IED buffer, an external floppy drive, and stereo speakers. All this in less than a year! When the Amiga bug bites, it really gets ya!

Anyway, the questions. Before I save up for the Eagle A1200 tower and Shuttle 1200 PCI plus Pentium Processor board, can you please tell me:



1) Is it possible to use the Pentium board as a render station for Real3D2 or Imagine 4?

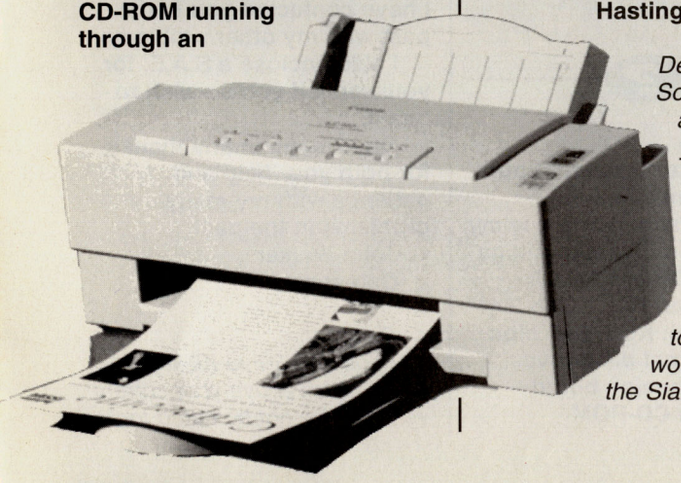
2) If so, how?

3) Would I be better off getting a second-hand PC and using the Siamese System?

Also could you tell me where I can get the full version of Cache CDFS Atapi.device. I am fed up with my CD-ROM shutting down every hour or so. I have written to Hirsch & Wolf with no reply. So I even tried ringing them. Now my grasp of the German language is limited to say the least, but as far as I could understand the chap on the other end was either telling me that he could not find a price for the program, or that they no longer stocked it. Please help.

Thanks again for producing the largest and most informative help section of the top four Amiga magazines (which I buy every month).

Bruce Andrews
Hastings



Dear Bruce,

Sounds like you are enjoying yourself with your new kit! To be honest, if I wanted to link a PC and Amiga together I would consider the Siamese System first and I have seen that used to render objects on the PC which were modelled on the Amiga. If that did not meet my needs I would then look at adding a true network card to the Amiga and PC. Either of these methods will give you maximum compatibility. Only then would I consider a PC card of some sort. There are users of PC boards, bridgeboards, Emplants, Software emulation etc. who are quite happy with their systems. It really depends on what you expect to be doing with the system.

I don't know of a supplier of Cache CDFS, but it sounds like a shareware program that has been available for some time. I've put a copy of this on your disk, sorry it's only got the Italian docs, but they do give the authors name and address. If this is the same as what you are using then you can contact the author directly.

As you already have the Eyetech buffer, why not contact Eyetech, they supply software for their CD-ROM, if that is what you are using, then Eyetech should be able to give you the details of how/where to obtain the full version.

FEEDBACK

Dear *AUI*,

I have just bought the March issue of *AUI*. Reading through the letters I came across one from Mr. M. Jones asking about advice on buying a CD-ROM. You write that if a Squirrel SCSI is plugged into the PCMCIA slot and you have more than 4Mb in the trapdoor then this will conflict with the PCMCIA device. Please note that this will only happen with 1220 RAM boards. With a 1230 RAM board you can safely have more than 4Mb and the PCMCIA slot is undisturbed. Thanks for the *AUI* it is still the best mag for the best machine. Where would the PC be if they had been through the problems that the Amiga has had to suffer. All you Amiga owners out there are the best and deserve better.

Rob Randall
Chester



Dear Rob,

Many thanks for the info on the 1230 accelerator card (not RAM board), I trust that you are using a PCMCIA device and that you have MORE than 4Mb on your 1230?

There have been lots of problems with all sorts of RAM boards and the 1220 accelerator, so it is safer to assume that there could well be conflict problems.

When writing to Amiga Answers please include as much information as possible about your system and about the software/hardware you are running. This will help determine what your problem might be and possibly its solution!

Send your questions to:

Amiga Answers,
Amiga User International
Unit 2, Utopia Village,
7 Chalcot Road
London NW1 8LX

or E-MAIL:
andy@auimag.demon.co.uk

Toolbox

In one of his famous Toolboxes, Andy Eskelson provides some tips on system enhancements and explains their possible unwanted interactions as well as suggesting how to deal with that old problem, printing.

There are several system enhancement packages available for the Amiga. Some change the display type giving an 'enhanced Workbench', which means that the icons are pretty and you have a new colour palette to play with. Every enhancement of this sort changes things. It may be minor, it may be major, but whatever happens the result is change. This may not seem important at first, but when you start to include other applications you may find that there will be an interaction between the 'enhancement' and the application that you are trying to use.

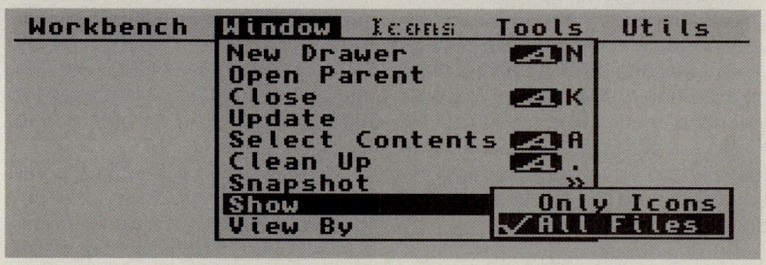
You may find it very worthwhile to have a second boot partition that contains only the basic Workbench setup. Such things that you need to look out for are MUI, Magic Workbench, MagicIcons, compression utilities such as Powerpacker, in short, anything that changes the way the system works.

You may think, why can't programmers test their software with the more common enhancements? Some do, some don't. However, the thing to remember is that it's the combinations that cause the problems, and it is simply impossible to test all the possibilities. Most programmers will design things to work with the documented system as provided by the Amiga.

Keeping track of what these systems do is very hard. The best thing I can suggest is that you make sure that you have a backup of your boot partition, see April 97 ***AUI***, as that is where most of the modifications will be made. Try to install things into their own directories where possible.

A very important pair of files exist in the S: directory. These are the startup-sequence, and user-startup. Depending on your Workbench version you will have one or both of these files. These files tell the Amiga how to set up at boot time. Many programs modify these files so that they automatically add themselves to the system on boot up. Making a copy of these files before you install anything can save a lot of trouble if things go wrong.

The easiest method of taking a copy is to select 'show all files' from



the Workbench menu and then just drag the file onto another floppy. If you only have one floppy then drag them into the RAM Disk and then onto a new floppy as a two step process. Note that you may have to select 'show all files' again when you click on the RAM Disk. Remember to select icons only when you have finished, or you will have to wait a long time for the icons to build.

Hardcopy

The Amiga can drive a wide range of printers, but this does seem to be one of the most common areas that users get confused with. The first thing to note is that as far as many printer manufacturers are concerned, the Amiga is too small a market to support. That means that when company xyz brings out their newest and greatest ever printer, there will not be any software drivers available for the Amiga. Generally such drivers are produced by third party developers. There are a couple of very good printer driver systems available, but they do cost.

Fortunately most printers will support one of the common standards, either HP-Laserjet or Epson ESC-P. This means that you will be able to use many of the new printers on the market, but perhaps not to their full capability. Taking the hardware side of things first. Connecting any printer to the Amiga is very easy. There are a couple of things to note. The first is to use the correct AMIGA printer cable. Many PC printer cables will work, but the printer connector on the Amiga does carry some other signals, and unless you know the wiring configuration of the lead that you intend to use, there is a danger that you might do some damage. The second, and a fairly obvious point, is to turn off your Amiga and printer before you connect them together. Again it is just because it is possible to short out a couple of the printer interface pins as you are fumbling the printer connection into the sockets.

One thing that I cannot easily comment on is the settings for the printer. Printers are getting more and more complex in their operation. This means that there are more combinations to go wrong. You must read the manuals that come with the printer carefully, and follow any setup procedures that are defined. If in doubt err on the side of compatibility, and make a note of every setting that you change or set up. Always make a record of the initial settings, so that you can get back to a known starting point.

Once the printer is connected and the Amiga booted up, you can then check out the printer preferences. At this stage don't worry about fancy drivers and graphics, just printing out some plain old ASCII text will prove that the basic operation of the printer is okay.

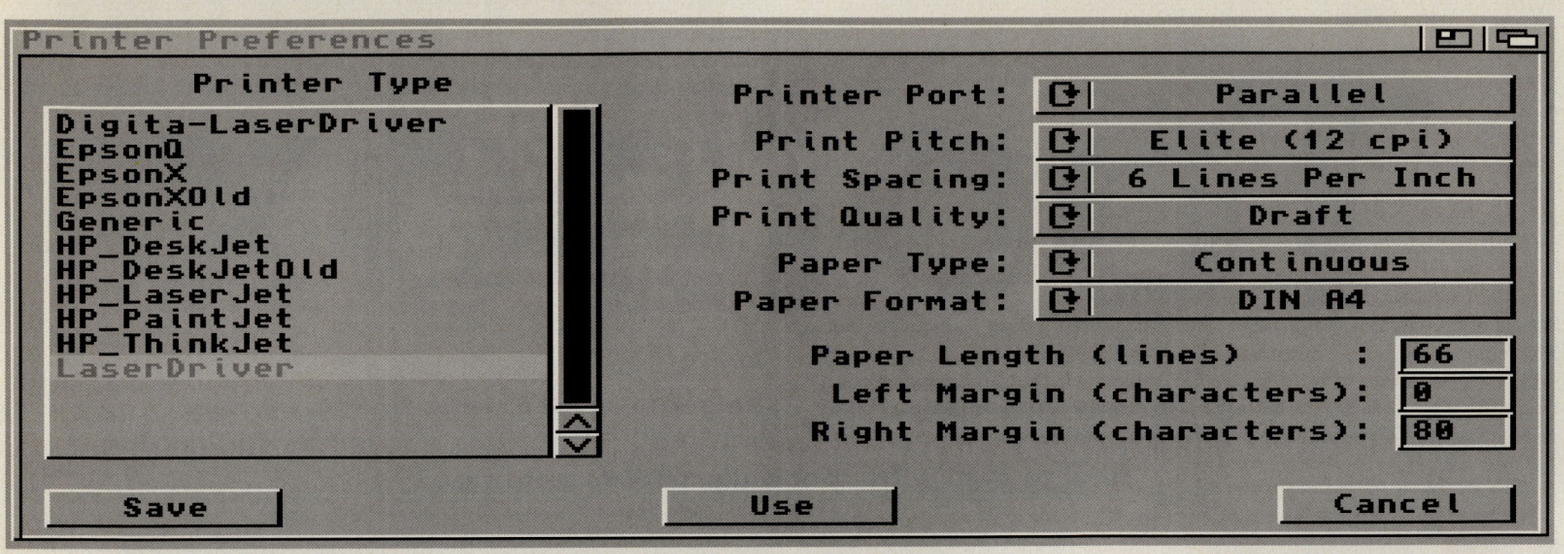
Loading the basic drivers.

There is a silly bug in some versions of Workbench that prevents you from automatically installing the printer drivers from the Extras disk. This is a problem if you only have one drive. The easy solution to this is to drag the printer preferences icon into the RAM Disk, then put your Extras disk in the drive, and then run the printer preferences program from the RAM: drive. Everything will then work correctly. If you have a directory utility such as SID or DOpus, then it is a simple matter of copying the printer driver files from the Extras disk into DEVS:PRINTERS.

Once you have the drivers available, I would suggest that you start with the EpsonQ or LaserJet drivers depending on your printer. There is one other driver that is worth keeping around for testing, and that is the Generic driver. This is a very basic text only driver, no graphics or fancy enhancements at all. So it is very good for eliminating the basic finger troubles that sometimes cause so much bother.

Use Printer Preferences to select the driver that you are going to use. Also ensure that you have set the printer port to parallel. There are a few serial printers about, but they are not too common. Leave serial printers alone unless you really know what you are doing.

Use a simple text editor such as ED or MEMACS or even use NOTEPAD, these programs do not do anything fancy at all, just create the necessary text. If you use a simple text editor that has no print function save a test file into RAM: and



call it something like test.text. Open up a Shell window and type CD RAM: then type COPY test.text TO PRT:

This will copy the file to the printer. If everything is working in a basic form, you should see a few lines of text appear out of the printer. If you are using a laser printer, you may have to press the form feed button to get the page to print. This is a feature of almost all laser printers, don't worry, it's not a fault.

Now a few things to check if it does not work:

- Check that the printer is turned on.
- That it has some paper in it.
- That you have fitted the ribbon or toner cartridge or that the ink cartridges have ink in them (yes, you know who you are!).

Once you get the printer to output basic text you can then progress to the more fancy output functions. Try using graphicdump which should print an image of the Workbench screen to the printer. If this works you have just about got the system cracked!

Generally you will find that the more advanced printer driver programs, such as Studio, have their own installers which take all the hard work out of the process. However, there is no point in trying to install a new printer and a new printer driver system unless you know that the basic printer operations are working.

The new generation of hi-res colour inkjets do need to be set up very carefully and it does take quite a bit of trial and error. It appears that no two printers are exactly alike and you need to adjust the amount of ink that is put onto the paper very carefully. There have been several instances where the paper has come out of the printer all soggy!

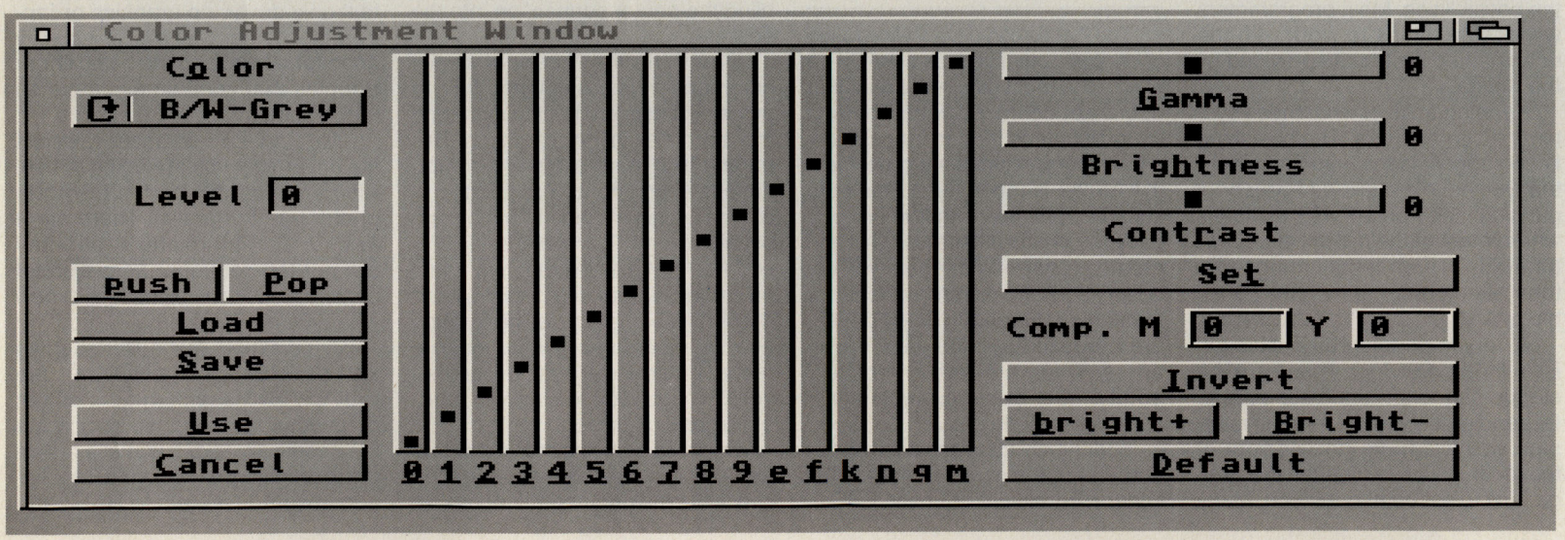
Talking about soggy paper brings up another important point. Paper is a very abrasive substance. It takes a lot of engineering to get the paper to feed correctly time after time. Inkjets are another matter. There are several types of inkjet on the market, but generally they can be thought of as black and white, mainly used for text, and full colour. The black and white printers tend to be rather more tolerant of paper types than the colour printers are. However,

inkjets basically spit a tiny drop of ink onto the paper. That ink has to dry fairly quickly, or the ink will smudge as the paper is advanced. Some papers are more absorbent than others, and this means that the ink soaks in and spreads out, rather like a drop of ink on blotting paper. This will reduce the density of the ink, so it will tend to look grey, rather than black. Other papers, mainly with gloss surfaces hardly allow the ink to soak in at all. This makes for a very dense print, but the drying times are much longer.

When dealing with colour printers, all the same problems exist, but they are multiplied because the colour printers put up to four times as much ink onto the page as would a black and white printer. There are special papers available that are designed to get the best from such printers. However, many manufacturers advertise their products as being 'plain paper' compatible. Even so, it is worth trying out several types of 'plain paper' to find the best match for your printer.

A common problem with colour printers is that the colours do not come out correctly. This does seem to vary between printers, even if they are the same model type. It is here that a advanced printer driver system will come into its own. The rule to remember is to print small test pictures, this will conserve your ink if nothing else. The advanced printer drivers have settings that allow the contrast, gamma, colour balance and so on to be adjusted. Just what adjustments are provided will depend on the driver.

Setting colour printers up is a lot easier than it used to be, but there are still fine adjustments to be made. A good tip is to borrow an idea from engineering. The half split method of fault diagnosis simply means split the unit under test in half, and test from the middle to each end. That will pinpoint the fault to one half of the unit. You then split the faulty half in half again and test that. This will pinpoint the fault to a quarter of the unit. You repeat until you find the faulty component. Use the same method on the settings. If the colours are too dark, halve the settings. If they are still too dark, halve them again. If they were too light increase by a quarter. ***AUI***



SADDLETRAMPS PD

Amiga Licenceware Specialists

Tel/Fax 01709 888127

F1 LICENCEWARE

5th Dimension Licenceware *(Full range available – over 30 titles)*



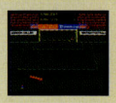
G.C.S.E. PHYSICS . . . Easy to use tutorial covering the laws of physics, complete with text, pictures, and animations. Requires KS2+ 2MB ram, great two disk set only . . . £4.95



ILLUSIONS . . . Superb art program for ALL 1MB Amigas. The interface is a bit special, full of special effects and drawing tools. Comes complete with clipart and online manual . . . £4.99



INTERNATIONAL GOLF . . . This game is a must for all armchair golfers, it offers three full courses, practise mode, multi-player tournaments, and is hard drive installable. Req - 1MBchip . . . £5.50



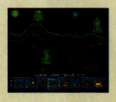
BRITISH FOOTBALL MANAGER . . . Take control of a rag tag bunch of men and mould them into the best football team ever, think that you are up to it? Includes animationed play . . . £3.95



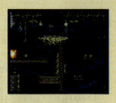
AMIGA ASSIST! . . . Easy to use tutorial for Workbench 2 & 3, aimed at the new user. Covers all aspects of owning and using an Amiga: icons, scripts, and the internet. 2MB chip . . . £3.95



SPLAT! . . . Classic breakout clone using fish not bricks!! Ideal for all ages with bright graphix and lots of funny sound effects. Includes speed control for all Amigas . . . £3.95



BEASTIES II ... A two player only Tanx/Worms clone with loads of special weapons including the dreaded "clockwork mouse". Players can even add their own extra levels. Req KS2.+ 2MB ram ... £3.95



ROTATOR . . . Brilliant platform/puzzle game, commercial quality presentation and addictive gameplay which should carry a health warning!! The price, just . . . £4.95



BURTON BIRD ... Superb platform/puzzler, scored 96% in a recent AUI review and won the Amiga Format game of the month competition. Bright graphix,cool sound track, and addictive gameplay. Req 1MB chip ... £3.95

REALITY M&S CONVERTER ... Developed exclusively for 5DL, this program allows Reality users to add almost any music module or sound FX to their new program. Req KS2.+ 2MB ram ... £3.95

Amiga & PC CD-ROMs loads to chose from, full listing in catalogue disk.

The Learning Curve Containing over 32,000 files to delight and interest both young and old with the vast diversity of Amiga educational programs. Files run directly from the CD, req WB2+ ... £18.95 +75p P&P

Aminet 17 £14.99 released February 1997 - join our Aminet subscription scheme (free) and get your next Aminet CD hot off the press for just £11.00 +75p P&P, call us now for details and have your credit card handy for instant membership.

F1 Licenceware

F1-089 A.B.G.T. AMOS V3	£4.99
F1-113 AMOS AGA Ext	£3.99
F1-120 AMOS INTUITION Ext	£3.99
F1-127 TELL THE TIME	£3.99
F1-131 TEENY WEENY'S AGA	£3.99
F1-136 GUIDE TO BLITZ	£4.99
F1-144 EDWORD v4.1	£3.99

We stock the full F1 range – over 100 programs + 5 GOLD titles

Postage Rates per Order

UK = 50p Europe = £1.00 + 15p per extra disk
ROW = £1.50 +20p per extra disk

All items are in stock and available for same day 1st class despatch

Please make cheques/Postal Orders payable to:
SADDLETRAMPS PD

ARTISTIX

An art package aimed at younger users, but great for all ages. Artistix will load on any 1MB Amiga and is bursting with interesting effects and drawing tools. The program even as online help, Just incase you run into trouble using any of the 170 options. Artistix was awarded 90% in the March'97 issue of AUI.

Price £4.99 +P&P

NEW AmiVoice v1.0

Powerful new Invoice/Order form application with ease to use interface, address database, invoice database, stock code sheet, plus exclusive session print feature. Ideal for home or small business use. Includes printed manual.

Requires minimum WB2 plus Hard Drive

SPECIAL OFFER PRICE £8.99 +50p P&P

RRP £9.99

Essential PD Selection 80p per disk

A202 GFXLab 24 (AGA)
A210 CartoonClips
E172 Guide to Fishing
G675 Birdie
G678 ZSoft Collection 2
G680 Greebles
G693 Danger Dogg (KS2+)
G696 Zombies (AGA)
G712 Speed Racer FX
G714 Amiga's Rule
M199 Spaceman Remix (2MB)
M205 Rix Mix 3
MC276 Dreamland #1 (AGA)
MC277 Dark Fiction II
MC282 Extreme Amos (2disks)(HD)
MC283 Dreamland #2 (AGA)
MC285 WordMania (AGA)
S222 X-Factor AGA (2disks)
S223 Sandra Bullock AGA
S224 Elvira AGA
U538 MUI v3.3 (HD)
U540 StartMenu (KS2)
U541 Nucleus Demo (KS2)
U542 Power Procedures 2
U543 Voyager (HD) (MUI)
U544 DBakup (HD)(MUI)

1000's of PD disks in stock

Send just 50p for our superb, easy to use, custom written CATALOGUE disk, supplied FREE with first order. Contains full details on ALL Licenceware & PD

1 Lower Mill Close, Goldthorpe, Rotherham, South Yorkshire S63 9BY

Credit Card HotLine 01709 888127

VISA DELTA Website-http://www.ware5d.demon.co.uk Access MasterCard

THE PD STAKEOUT

David Ward names the better PD in recent times. If you don't have at least some of these programs in your collection, then you should be ashamed of yourself. Go out and buy them this instant!

Scoring

The marks awarded to each PD disk are based purely upon its own merits and, of course, our personal views. Value for money and reliability are also taken into account as well as features and quality of the software.

Compatibility

The PD disks reviewed in this issue were tested on an A1200 with a basic 2 Mb of Chip RAM. Check with your PD supplier that the disks you are ordering are compatible with your Amiga.

PD OR ShareWare?

All freely distributable software comes under the rather deceptive umbrella of "public domain". Quite a lot of this software is, in fact, shareware. Shareware means that if you like the software, or use it fairly regularly, the author will request a reasonable donation from £5 to £20. There is usually a note on the disk informing you if the software is shareware or regular PD.

Whether or not you send a donation to the author depends totally upon your level of conscience and morals. Remember, if you send a donation to the author, you may receive an updated version of the software. Even if you don't receive an update, you will have given the author the incentive to continue contributing into the public domain.

Spar Trek

NBS

A very naughty animation that makes use of clips and samples from the Star Trek cartoon series to promote the CD32. It was one of a series that used the technique of stringing bits and pieces from the series together along with fresh graphics to tell a Commodore related story. Very entertaining if illegal in its use of copyright material.

92%

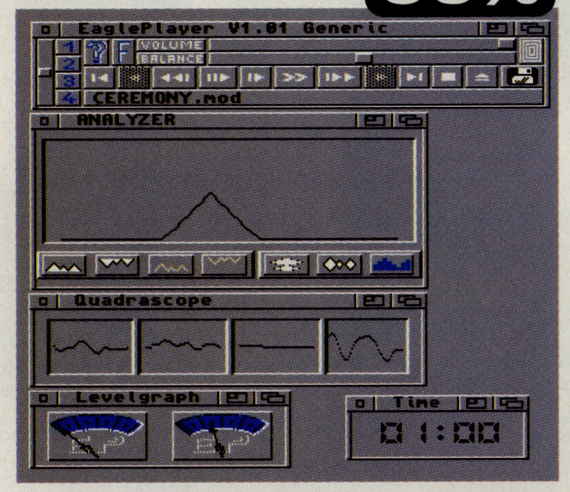


Eagle Player

Roberta Smith DTP

Fancy a module player that can support 84 different formats and show you lots of snazzy graphics while belting out those tunes. Eagle Player should fit the bill superbly.

90%



Deluxe Galaga

17Bit

Remember when Space Invaders first ventured in pubs and clubs and crowds gathered to see brave souls sweat as they battled the relentless onslaught of marching aliens accompanied by repetitive sounds? Boring, wasn't it? Then came a more exciting game - Galaxians. Here you controlled a spaceship charged with defending Earth against a wheeling alien battle fleet. It has good music too.

On the Amiga the best clone of this game ever to appear was undoubtedly Deluxe Galaga with its many extra features not found in its arcade inspirator.

91%

CHANQUES

Any good PD library

We were delighted when this puzzle platform game arrived from Mexico for it proved that there was Amiga life outside of Europe and the USA. This entertaining game requires you to get your three on-screen characters to co-operate in getting an object to the exit before the time limit expires. A simple challenge that is often difficult to complete the first time. Very absorbing.

90%

Iconographics

Kew=ll

This diskful of replacement icons has yet to be superceded in our opinion. The crispness of their high-res design and the eight colours used making an ideal alternative to the boring four colour low-res Commodore ones. Painlessly installed, Iconographics does not mess up other software as Magic WB is prone to.

95%



THE STATES OF EUROPE

F1 Software

More educational software has been released for the Amiga through the PD libraries that the commercial software houses. And this title, The States of Europe, is an excellent example. Detailing the facts on 48 nations, the hyperbook gives you the low down on a country's size, population, population density, inhabitant's life expectancy, riches, political status, and much, much more. A lot of information for very little money.

91%

AmigaDOS

17Bit

The language of the Shell is a daunting area for many Amiga owners, both novice and veteran. Luckily this disk from 17Bit PD can shed some light on the seemingly arcane mysteries of commands like Assign and MakeLink.

96%

Text Engine

Any good PD library

A fully featured word processor with 36,000 word spell checker for a fiver. Can't be bad, and it wasn't. Still highly recommended.

97%

TOOBZ

NBS

Simple appearing games can prove the most difficult to master and play. Such is Toobz, a game that requires you to guide a coloured ball to a similarly coloured destination. You may think this easy, especially as the ball must follow a track, but it is controlling the ball at junctions that provides the excitement. And if that's not enough, the ball can change colour part way through.

92%

The Desktop Guide to Electronic Music

Welsh Mozart

Put together by the late Rob Baxter and Hugh "The Welsh Mozart" Gammon, this is a well programmed guide to electronic music, especially Amiga created music. The guide covers analogue and digital sound synthesis, chip tunes, and is copiously illustrated. There is even a spoken soundtrack using the Amiga's built-in speech synthesis.

93%

Kids Only

Seasoft

If you want to keep the kids amused for hours then Kids Only is an ideal three disk set. Providing lots of fun for the under-90s, the programs provide dot-to-dot, colouring pad, I Spy, pairs, a sliding block puzzle, music maker, and word search. Kids Only is loads of fun, especially for kids.

94%

Work & Play

Seasoft

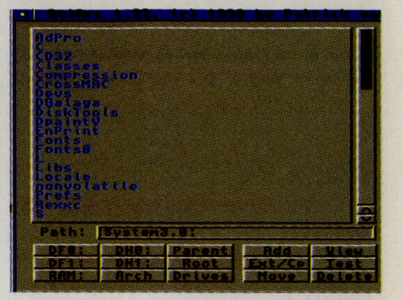
More educational software, this time for the under tens. Work & Play covers the mathematics we use in everyday situations such as the supermarket. Multiplication, addition, and division are taught in a fun and memorable way.

94%

ARCHIVERS

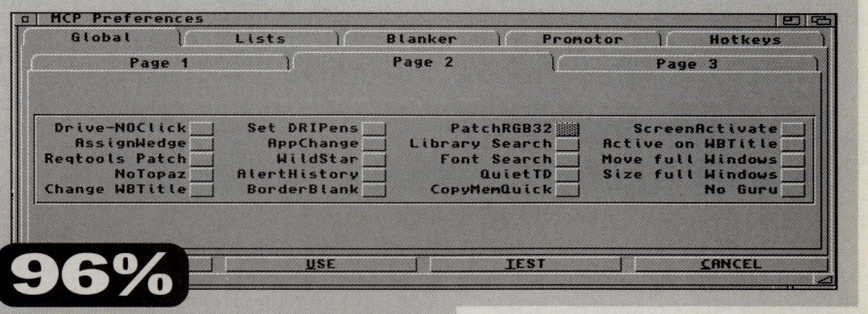
KEW=II

For many, the ability to get an archiving program to de'arc something easily is an experience they have yet to come across. Typing in long strings of unintelligable commands to extract a single file from an LhA archive can be a frustrating excercise, especially when the Amiga sits there smugly telling you that it doesn't understand your efforts.



This is where the excellent GuiArc comes in. Supplied on this disk from Kew=II along with LhA, Arc, Zoo, Zip, Arj, and DMS, the software painlessly allows you to compress and extract files at the press of a button. As it behave just like a directory manager you should have no problem in sitting down and getting the results you want first time.

93%



96%

MCP

Kew=II

The Master Control program is one of those all-singing all-dancing utilities that replaces a whole host of patches and commodities in one go. At the touch of a button you can switch in and out various blankers, screen promotion, crunch patches, tool aliases, and so on. The list may not be endless, but it certainly is extensive.

VARK

Roberta Smith DTP

If want disks jam packed with hot utilites then the Vark range from Roberta Smith fulfils that need. Hundreds of the best programs grace these volumes, which reached the mid-teens before "Mr. Vark" decided to call it a day.

95%

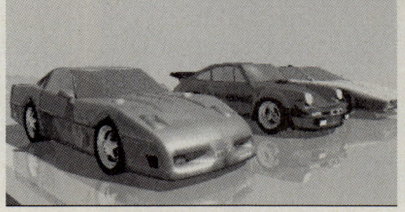
Mean CD Machine

Roberta Smith DTP

While on the subject of great animations and the CD32 we must also mention Mean CD Machine by Craig Collins. This four disk four megabyte 'movie' shows the CD32, Philips' CD-i, and Sega Mega-CD, as hot cars racing to a finish line to prove which is the best console in the world.

Rendered in 16 colour greyscale the anim lasts for about a minute and a half. No sound is provided, and it is not needed, the graphics easily conveying the storyline. It's a pity the winner at the end of the race never really made it into the big time as it should have.

98%



Contacts for PD reviewed in this AUI

F1 Software
31 Wellington Road
Exeter, Devon
EX2 9DU
Tel. 01392 493580

Roberta Smith DTP
190 Falloden Way
Hampstead Garden
Suburb, London
NW11 6JE
Tel. 0181 455 1626

Welsh Mozart
Hugh Gammon
77 Llewellyn Street
Llanelli, Carms.
SA15 1BD

NBS
8 Watchbell Lane
Newport
I.O.W
PO30 5XU
Tel. 01983 529594

Kew=II
PO Box 672
South Croydon
Surrey
CR2 9YS
Tel. 0181 657 1617

Seasoft
Unit 3
Minster Court
Courtwick Lane
Littlehampton
West Sussex
BN17 7RN
Tel. 01903 850378

17Bit Software
1st. Floor Offices
2-8 Market Street
Wakefield
West Yorkshire
WF1 1DH
Tel. 01924 366982

◄continued



Blue Rose Colour Fonts

Eddie Barry

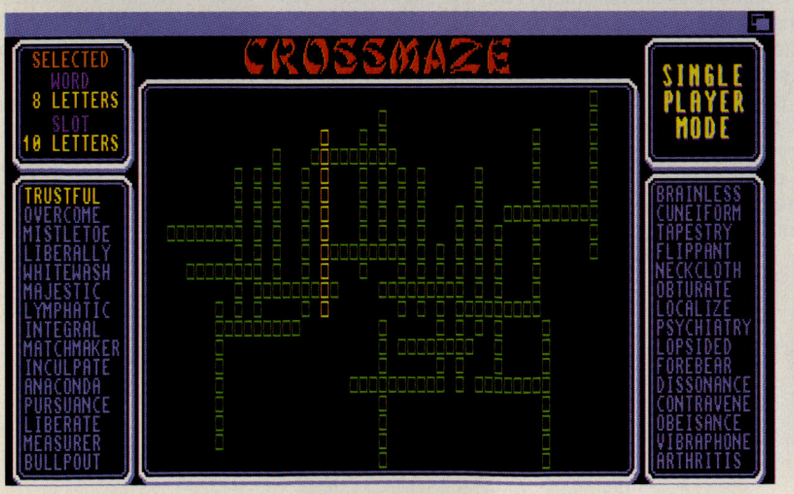
Send £5 to Eddie Barry and you will receive a four disk set of twenty-seven high quality colour fonts ideal for use in games, demos, slideshows, and Scala. Disk one contains an auto-booting slideshow displaying the fonts while playing a background mod. The other three disks contains the fonts themselves, all created using Cloanto's Personal Fonts Maker, plus extra palettes should you wish some to be in other hues.

I think you'll agree that, judging from these screenshots, these colour fonts from the emerald isle are just the sort of thing to perk up that project you have in mind.

88%







Hard Drive Locker | Lockup

Berkshire PD **Roberta Smith DTP**

It seems peculiar that there are Amiga users out there who are writing utilities to prevent unauthorized access to their computers when there is a perfectly adequate Shell command called Lock that does the job. Here we have two programs submitted that do this, and a bit more.

Hard Drive Locker is an AMOS behemoth that prevents you from accessing Workbench or other screens and therefore drives by disabling the Left-Amiga-A short-cut. In addition, it has three levels of password protection so you can restrict the amount of access to your system, even setting a time-lock so that access is restricted to drives only between certain times. And if that wasn't enough, Hard Drive Locker also records incorrect passwords and access times so that you, as the system controller, can check up on what's been going on.

Lockup, on the other hand, has been written in C, and it shows in the much cleaner interface used and the smaller size of the program. However, there are fewer options than Hard Drive Locker although it does allow for multiple users with different passwords. A history file is yet to come, but Lockup does have lots of additional tools to help you set the passwords up.

Neither program is particularly strong security-wise and can easily be broken by a clever user.

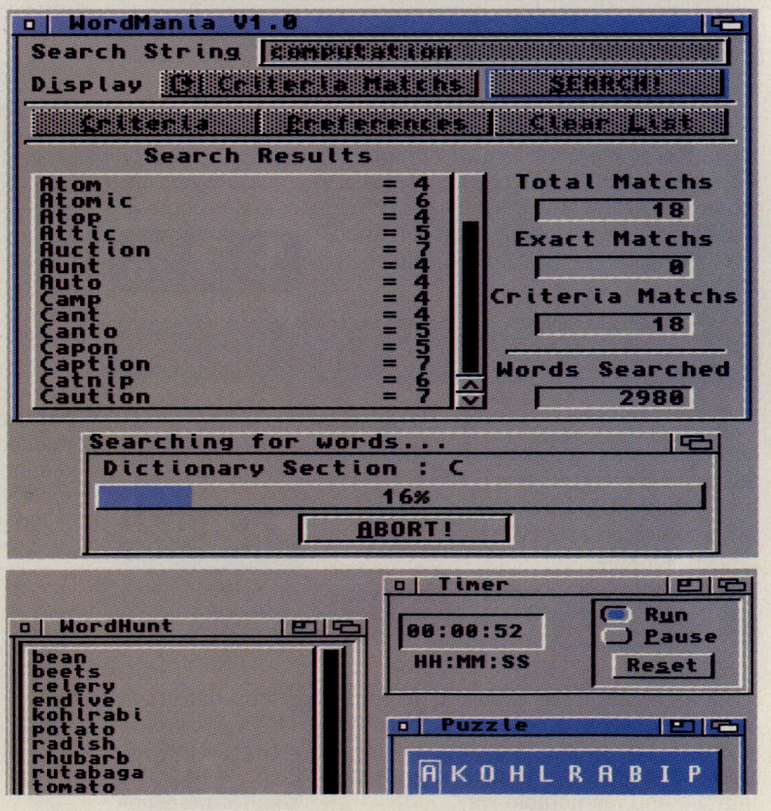
75%

ONLINE GAMES #10

OnlinePD

A single disk with five word related pieces of software: a crossword puzzle and creator, a word search program, another sort of crossword puzzle, and - my favourite - a program to find as many words as possible from another word. Criteria can be set, such as the minimum number of letters in the required words, and the program set in motion. For example, it found ninety-eight words of a minimum of three letters from the word 'computation' in under a minute. I once entered a competition using this theme and it took me days to get that far, eventually winning third prize with 121 words. This 75p disk is worth it just for this program alone.

96%



Silly Stories

Paul Riggs

Every type of computer, since their earliest appearance, must have had a program like this written for it at some point. From mainframe to mini to micro, the silly story generator has been a popular pastime. This effort, by Paul Riggs, requires you to enter lists of words to be inserted into the story, of which there are four to choose from: a recipe, a newspaper report, a fairy tale, and historical report. Here's one we prepared earlier with our selected words in italics...

The battle of *Utopia Village* was one of the fiercest, most *excellent* conflicts ever recorded. It was fought in 1816, and was *seemingly* sparked off when the *triumphant big* king of *Dog*ington sent his army to *Utopia Village* to try and steal their *marvellous shelf.*

King *Clifford-Jones* the *wonderful* of *Utopia Village* retaliated by *loudly* throwing *disgusting letters* at the approaching army.

War broke out, with *Utopia Village's* forces fighting to keep control of the *holy purple shelf.* War raged for 24 years, with heavy losses of persons and *cars* on both sides. At one point, a brave *Dog*ington warrior seized the shelf from behind enemy lines, but while making his escape he was struck on the *leg* by a well-aimed *triangle* and dropped the *shelf.*

Purposefully, the battle was brought to a simple end when the king of *Utopia Village* decided to equip his army with *tremendously* bred *orang-utans,* a *painful* new technology in those days. *Dog*ington's army was forced into a *bruised* retreat by the *queer orang-utan* riding army, and had to give up its *choice* attempt to steal the *marvellous shelf* of *Utopia Village.*

So what do you think? Amusing? If so, then for a pound you can get the single disk program directly from Mr. Riggs at the address below. By the way Mr. Riggs, we've corrected the spelling and grammatical mistakes in our example.

78%

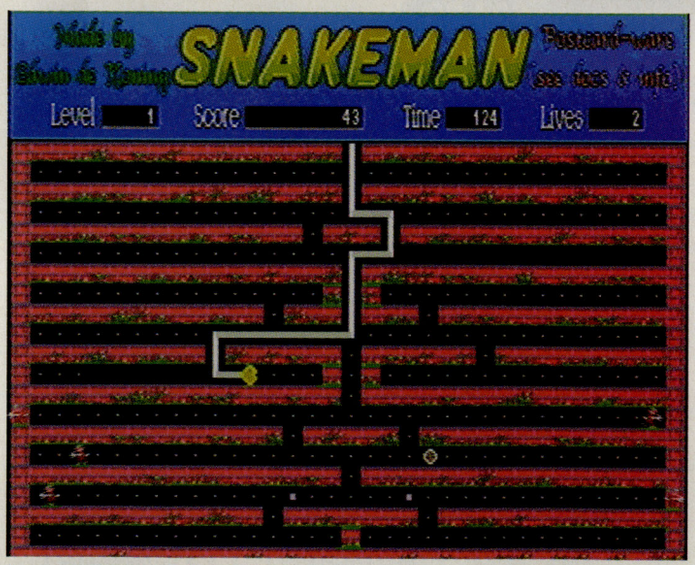
SNAKEMAN

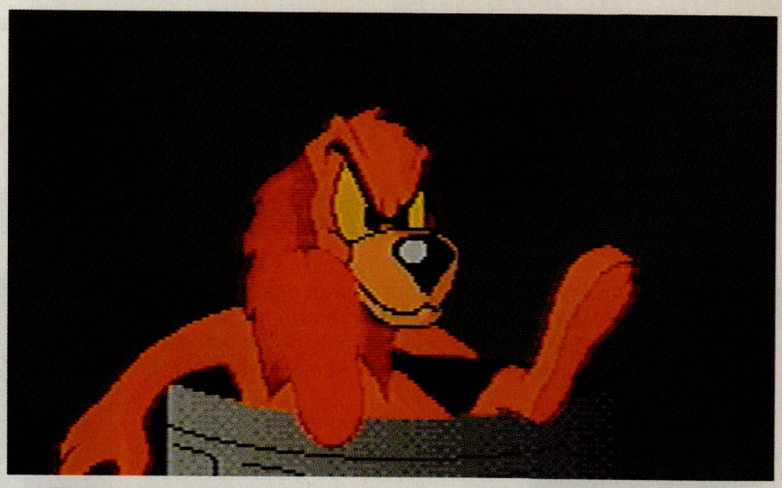
Online PD

Based on Pacman, Snakeman is different in that the hungry head is attached to a body. Using the joystick you must guide the snake through the levels eating all you can, including the guardians. But beware, these guardians can severely damage your health should their spears come into contact with your body, so you must occasionally retreat by making express use of your joysticks 'fire' button.

Not exactly a taxing game but still enjoyable... and not a bad first effort from Edwin de Koning.

79%





Charlie Cat Quickie No.3

Roberta Smith DTP

Possibly the last animation done on the Amiga by Anthony Whitaker, he asks AT to get the platform sorted out else defects, this 2.5Mb animation features his leading protagonists Charley Cat and Mutch. Also appearing is Ryu'cho, from the award winning 'Jap Cat Japes', Charley's martial arts expert friend.

As you can guess, Mutch gets more than he bargained for when he attempts to waylay Charley while Ryu'cho is in the area, but he gets his revenge in a subtle way at the end.

86%



Sweet Cheats

Online PD

A up to date Amigaguide document with cheats for hundreds of games. Worthwhile if you an avid games player and are stuck for how to proceed to the next level. Unfortunately some of the ruses described here do not actually work, but these are a very small minority and the compiler, Keith Krellwitz, admits that not all have been tested. Every home should have one.

82%

If you have created a masterpiece and you would like it reviewed here or if you own a Public Domain company and want to contribute new and interesting PD, please don't hesitate to send it in. The address is:
The PD Stakeout, Amiga User International, Unit 2, Utopia Village, 7 Chalcot Road London NW1 8LX

Contacts for PD reviewed in this AUI

Roberta Smith DTP
190 Falloden Way
Hampstead Garden
Suburb
London
NW11 6JE
Tel. 0181 455 1626

Online PD
1 The Cloisters
Halsall Lane
Formby
Liverpool
L37 3PX
Tel. 01704 834335]

Berkshire PD
PO Box 179, Reading
Berkshire, RG3 3DD
Tel. 0589 722502

Paul Riggs
17 Cameron Avenue
Abingdon, Oxon.
OX14 3SR

Eddie Barry
14 Tudor Brae
Donaghcloney
Craigavon, Co. Armagh
BT66 7LF

David Ward joins Mark Forbes at the controls of the latest batch of Amiga entertainment.

WORMS - THE DIRECTOR'S CUT

Team 17 £29.99

Programmer Andy Davidson has put a great deal of time and effort into the Worms' revolution. Unfortunately, he tells us that 'Worms - The Director's Cut' will probably be his last game on our platform. Worms 2 will may never be released on the Amiga.

The game has been designed to only run on AGA machines, as it requires a minimum of 2Mb of memory. Although many ECS machine owners will have this amount of RAM too in their A500+ or A600 machines, Andy Davidson has severely restricted his market with his choice. It's not as if the game needs all the graphical enhancements.

Everything that was in the original game before is still here, but in updated form. The landscape generator has many predefined lands to load or you can create your own custom levels for play against the computer or friends using 'graffiti' mode. Plus the new crazy cave levels that pop up, by default, every fourth level. This is player alterable.

Here are just a few of the zany new weapons to whet your appetite: baseball bat, Postal strikes (just like real life), old women, sheep on a rope, mad cows, Ming vases, super sheets, and holy hand grenades. The options have been greatly expanded, although the author may have gone a little too far. You can now disable the hit strength of all the weapons in the game so that your tiny worm lives a little longer. A bit of a cheat mode there.

The original Worms game had some annoying points, but these seem to have been rectified in this excellent sequel. Worms is infuriatingly playable and addictive and the sequel is even more so. Go get it! Worms - The Director's Cut is an impressive second outing, and it bodes well for Andy Davidson's future as a serious games developer, albeit on other platforms.

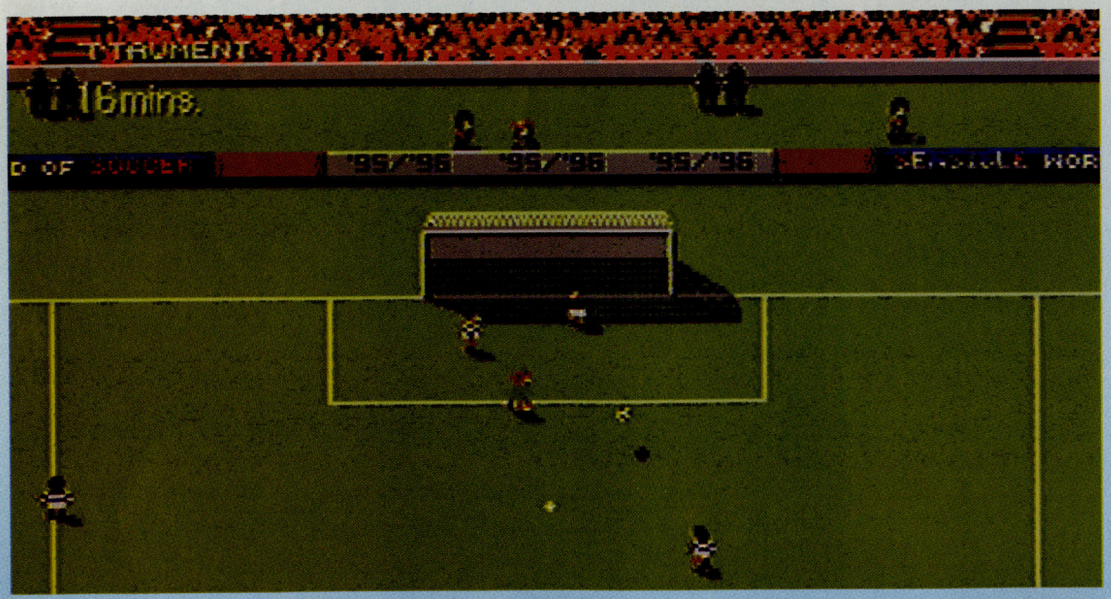
INFO

Rating: 91%



SENSIBLE WORLD OF SOCCER '96/'97

Warner Interactive £9.99 as upgrade, or £24.99



What, another Sensible World of Soccer release? It wasn't that long ago when *AUI* reviewed the Euro version. At least this upgrade only retails for £9.99, rather than the previous two games which had little in the way of differences between them and cost a whopping twenty-five big ones.

You do need the original game disks to ready yourself for the 96/97 season. If you don't, then be prepared to spend £25 on the best soccer game on the Amiga today - Sensible World of Soccer.

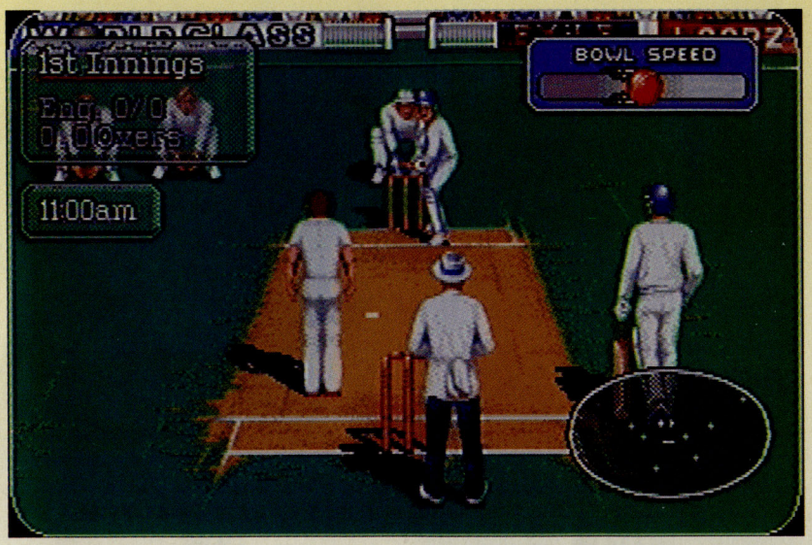
Sensible World of Soccer is still the reigning champion of all football games in the world and there's nothing anybody can do about it!

INFO

Rating: 96%

BRIAN LARA'S CRICKET '96

Audiogenic £19.99



Considering ***AUI*** is but a well walloped six from Lord's Cricket Ground, the game reviewing staff are surprisingly ignorant about this most English of games. For the first time, we've decided to read the manual as we hardly ever played cricket games on the Amiga. A wooden stick, an old bin, and a tennis ball is more our mark.

Audiogenic apologize for having all white teams representing the West Indies and Pakistan in the Amiga version of Brian Lara's Cricket '96. "However, this limitation will not affect the gameplay in any way", they told ***AUI.*** It's hard to believe that programmers are still coming up with that old chestnut. Come on guys, even if it meant you had to make it detect extra memory for enhanced features, the Amiga can handle it.

All the famous names and cricket teams are in there for real. There are two sets of teams on offer: 12 international and 18 county sides. You can play one of the three difficulty levels - amateur, professional, or world class, if you think you're that good. However, there is a fourth level called arcade which is more geared towards the computer batting more aggressively. You can also, if you like, alter the team or match settings before play.

Brian Lara's Cricket '96 is a superb simulation of the game of leather on willow. It might not be our regular cup of tea, but we sure know a good game when we play one. It's one of those games that you have to sit down and play for hours before you make a final judgement. The graphics and sound are crisp and clear, although the in-game music grates a little.

We were not great cricket fans, but now that we've actually played it over and over again, we're surprisingly hooked. It's fine playing against the computer, but if you've any pals to play with (you know what we mean!), make sure you're free for an hour or two as one game takes ages to finish. Just like the real-life version.

Several years ago there was a choice when it came to cricket sims, and Brian Lara's Cricket looks a lot like Audiogenic's earlier Graham Gooch's Cricket, but we can definitely say that this latest one is the only one to have now. Buy this game if you truly love cricket (and that goes for you too Mr. Major, especially now you've got an Amiga installed at Tory HQ) or even if you don't.

INFO

Rating: 80%

PRIMAL RAGE

Warner Interactive £25.99

If you've wandered around your local amusement arcade you might have noticed an arcade game called Primal Rage with its huge prehistoric characters from your favourite B-movies such as 'At The Earth's Core', 'Warlords of Atlantis', or our particular favourite (only because of Raquel Welch) '20 Million Years BC'. Come on, don't say you've never seen any of these classic films?

Seven disks swaps later...

Yes, folks, Primal Rage is not hard disk installable! Anyway, when you finally start the game you can select one of the seven dinosaurs available, each with roughly ten different moves between using with a single button joystick. You can, if you wish, opt to use a two-button joystick, which would help with the hard to perform moves, but how many of you own such a rare beast?

Like all beat-'em-ups there are some secret moves to be found in Primal Rage, and we're not giving you any hints as to what they are.

Once you've mastered the controls you can pick a suitable difficulty level. There are sixteen almighty levels to choose from and they range from incredibly easy to practically impossible. There is also a cheat option that allows you to weaken your opponent's energy level before the real fight commences.

Primal Rage gets a lowish score because it is on the borderline of these types of game. It's an average beat-'em-up because it doesn't have those extra features that make a game, like Capital Punishment, so good. The conversion from the coin-up has lost a little of the original, but not much. The disk accessing is the most annoying feature of this game.

It is admirable that the programming team have tried to breathe new life on the beat-'em-genre by using dinosaurs instead of the more usual muscled hunks, but ultimately the seasoned game player is unlikely to be satisfied in the long term.



Primal Rage was finished six months ago, but it took that long for us to get a review copy!

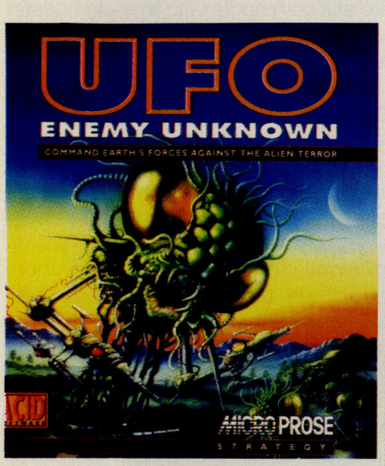
INFO

Rating: 75%

◄ (79) continued

BUDGET REVIEWS

Micro Prose re-releases from Guildhall Leisure



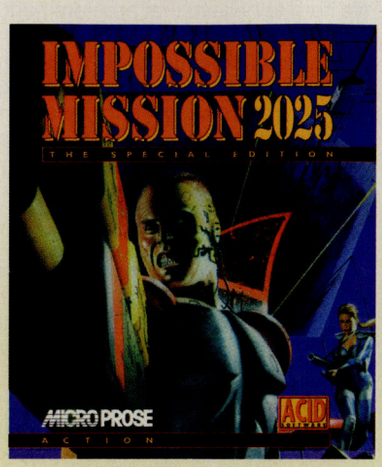
UFO
£14.99

Not the game of the recently revived TV series, but it is very close. Instead of controlling S.H.A.D.O. (Supreme Headquarters Alien Defence Organization) you are in charge of X-com - a team of special forces who must battle against alien invaders from outer space.

Your first action is to select your base and no, you can't have a film studio as a cover. You must then gradually equip it while also on the look out for marauding UFOs. These must be shot down and a crack squad of troops dispatched to despatch any of the extraterrestrial crew found wandering around the crash site.

Now it may seem somewhat routine so far, but the great thing about UFO is that it's so involving. You just get deeper and deeper into the game. The only criticism is that it can get slow in places while you're waiting for the aliens to turn up, no change there, but apart from that it's a stunning game.

Rating: 92%

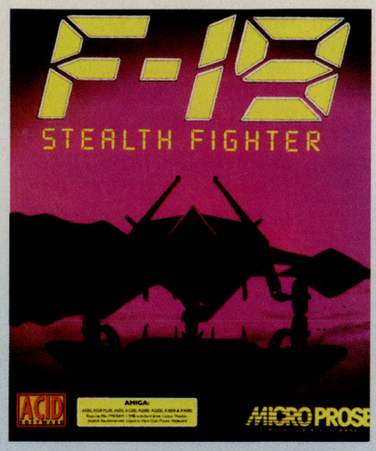


IMPOSSIBLE MISSION 2025
£9.99

It's the same old story. An evil scientist by the name of Elvin the Mad Atombender has penetrated the security headquarters of a top organisation and this is where you come in and prevent him from blowing the world to kingdom come. If that isn't enough, you must race the clock while avoiding the berserk robot inhabitants of the building if you want to progress to the higher levels of the game.

Unfortunately the game is a bit too easy for our liking and, although fun in places, it does have its irritating moments too. However, the far better prequel is included in the box, so you are not hard done by at this price.

Rating: 80%



F-19 STEALTH FIGHTER
£14.99

This is a distinguished, although old, game. It came out in 1988, before Stealth technology was publicly acknowledged, and has 3D graphics and sound which are still impressive.

With four different real world scenarios (Libya, Persian Gulf, North Cape and Central Europe) and absolutely tons of missions, F-19 Stealth Fighter is only bettered by Gunship 2000 as 'best' Amiga flight sim. The research alone that must have gone into F-19 made it more involving than most other flight sims, and this is a breath of fresh air. An excellent title at an excellent price.

Rating: 85%



F-117A NIGHTHAWK
£9.99

After F-19 came F-117A. The improvements to their latest flight sim we expected Microprose to have made from their experiences with F-19 were in there, in force. F-117A does not disappoint. The combat is generally thick and fast, and you'll find that there is a great deal to do while undertaking the plentiful missions. Most of the time you'll be ducking and diving with all the planes trying to get a lock-on you - just watch out for those MIG muthas!

You'll need an A1200 equipped with Fast RAM or some sort of accelerator card to do justice to this the complex graphics of game. This may be your last chance to get a flight sim of this quality. Don't miss it.

Rating: 93%

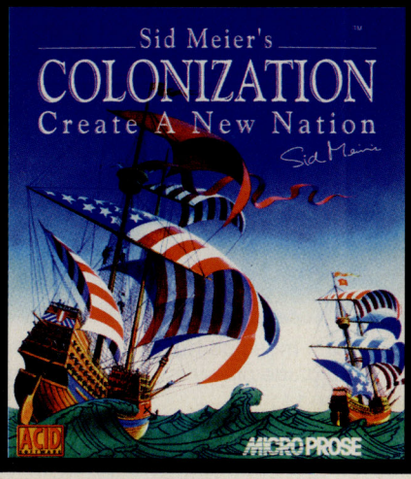
B17 FLYING FORTRESS
£14.99

What a month for all you nostalgic game fans! Here's an oldie if I ever we saw one! B17 Flying Fortress. If you want a flight sim with a good pedigree then this is it. From the opening screens you realise how much time has been spent on this game. There are quite a number of interesting and varied missions, twenty-five in all, and many are very tough and extremely involving. This means a great time for all you strategic students out there and sweat inducing white-knuckle experiences for the rest of us.

Rating: 79%

COLONIZATION
£14.99

When Colonization was released many people mistakenly thought it was a sequel to the magnificent Microprose strategy sim 'Civilization'. It was clear, after playing it for a few minutes, that it was nothing like Civilization at all. Colonization requires you to send your countryfolk across the seas to conquer new lands so as to improve your position and trade status with other realms. Then, when you feel you are successful enough and have a large stream of resources, you must declare independence and go it alone and look after your people. Colonization is a good game, although the trading aspect can become boring.



Rating: 80%

FIELDS OF GLORY
£14.99

Table-top wargaming is a popular hobby in Britain, especially the Napoleonic era. Hundreds of lead figures in colourful uniforms recreating famous battles of the past like Waterloo and Austerlitz. However, the cost of equipping yourself for such games and the overheads running them - it's not easy playing solitaire - mean that the Microprose sim Fields of Glory can give you a taste of the hobby without the hassle.

You can be in command of light and heavy cavalry, foot soldiers in defensive 'squares', and the devastating artillery. Relive the terrible cost in human life and you'll never see war in the same light again.

Rating: 85%



Tel: 01263 722169
Mobile: 0370 766679

SAdENESS Software, 13 Russell Terrace, Mudesley, Norfolk, NR11 8LJ
email: rich@sadeness.demon.co.uk
Web Site URL – http://www.sadeness.demon.co.uk/

3000 Jpeg Textures	**£14.99**
3D Images	£8.99
3D Objects	£8.99
Adult Sensation 1	£17.99
Adult Sensation 2	£17.99
Adult Sensation 3D	£17.99
Adult Sensation 4 (Adult Animations)	**£27.99**
AGA Experience Vol 2	£12.99
AGA Experience Vol 3 (Date – 3/97)	**£14.99**
Amiga Desktop Video 2	**£13.99**
Amiga Developer v1.1	£13.99
Amiga Repair Kit	**£44.95**
Aminet 4	£4.99
Aminet 10	£11.49
Aminet 11	£11.49
Aminet 12	£11.49
Aminet 13	£11.49
Aminet 14	£11.49
Aminet 15	£11.49
Aminet 16	**£11.49**
Aminet 17	**£11.49**
Aminet Box Set 1	£19.95
Aminet Box Set 2	£27.99
Aminet Box Set 3	£32.99
Aminet Box Set 4	**£32.99**
Amos PC CD	£17.99
Anime Babes (NEW STOCK)	**£17.99**
Arcade Classics Plus	£13.99
Assassins Games	£8.99
Assassins Games 2	£17.99
Blitz Enhancer	£15.99
C64 Games v2	**£37.99**
Capital Punishment (floppy)	£24.99
Card Games	**£13.99**
Dem Rom	**£14.99**
Draw Studio (NEW! floppy)	**£59.95**
Draw Studio (NEW! CDROM)	**£74.95**
Emulators Unlimited	£17.99
Encounters	£14.99
Epic Collection v2	£17.99
Epic Encyclopedia 97	**£27.99**
Epic Quiz Show (Date – 4/97)	**£22.99**
Euroscene	£4.99
Euroscene 2	£8.99
Euro CD Vol 1	**£11.99**
Geek Gadgets	**£17.99**
GFX Sensation	£17.99
GIF Sensations	£17.99
GIGA Graphics (4CD)	£17.99
Flash Rom	**£27.99**
Global Amiga Experience	£24.95
Guinness Book of Records	£17.99
Hidden Truth	**£29.95**
Horror Sensation	£17.99
Hottest 6	£8.99
Ibrowse (floppy)	**£29.95**
Imagine PD3D	**£17.99**
Insight Dinosaurs	£17.99
Insight Technology	£17.99
Into The Net (2CD)	£17.99
Kara Fonts	**£47.99**
Learning Curve	**£17.99**
LightRom Gold	**£17.99**
LightRom 3 Triple Pack	**£17.99**
LightRom 4	**£27.99**
Magic Publisher	£44.99
Magic Workbench Enhancer v2	£17.99
Meeting Pearls 3	£9.99
Meeting Pearls 4	£9.99
Mick Davis' Cartoon Clipart	**£22.99**
Mods Anthology	£17.99
Multimedia Backdrops	**£19.99**
Multimedia Experience	**£17.99**
Multimedia Toolkit	£9.99
Multimedia Toolkit 2	£17.99
Network CD 2	£14.99
Nexus Pro	£8.99
Nothing But GIFS	£17.99
Nothing But Tetris	£8.99
Official Octamed 6 CD	£19.99
Oh Yes More Worms	£4.99
PDSoft Utilities 2	£9.99
Retro Gold Emulators	£17.99
Scene Storm	£17.99
Sci-Fi Sensation v2.2	£17.99
Sexy Sensations	£17.99
Sound FX Sensation	£13.99
Sounds Terrific 2	£17.99
Speccy 96	£15.99
Special Effects Vol 1	£17.99
System Booster	**£17.99**
UPD Gold	£17.99
Utilities Experience Vol 1	£8.99
Wierd Science Clipart	£8.99
Wierd Science Fonts	£8.99
Wierd Textures	**£14.99**
Women of the Web	**£24.95**
Workbench Add Ons	£24.95
World Atlas	£29.95
World Info	£17.99
World of Clipart Plus	£15.99
Zoom 2	£13.99



GEEK GADGETS
OUT NOW
£17.95

Geek Gadgets(TM) contains the Amiga Developers Environment (ADE), a project organized by Cronus to produce and support Amiga ports of dozens of the most popular development tools and utilities from the FREE Software Foundation, BSD, and other sources. This CD contains virtually all the tools you need to get started programming on the Amiga, including advanced C, C++, Fortran, and ADA compilers, assembler, linker, EMACS editor, "make", source code control systems (rc & cvs), text and file utilities, GNU debugger, text formatters (groff & TeX), and more. Also included are beta test versions of ports in progress, like a port of the X Window System. Everything comes with complete source code and all binaries have been compiled from the supplied sources. All tools on the Geek Gadgets CD can be run directly from the CD-ROM, without the need to install any files on your hard drive.



AMINET BOX SET 4
OUT NOW
£32.95

AMINET SET 4 offers you everything that was added to the archive since AMINET SET 3 was made, plus a full commercial version of Directory Opus 5.11 including an inexpensive upgrade offer to Directory Opus 5.5 limited until October 31st 1997. AMINET* SET 4, dated January 1997, consists of approximately 4 gigabytes of software in 8,000 archives. Since the release of Aminet 16 more than 610 MB of new software have appeared.



THE LIGHT ROM 4
OUT NOW
£27.95

The Light Rom series continues with an all new compact disc with a completely new set of objects and scenes for Lightwave. The compact disc is compatible with all versions of Lightwave up to version 5 for both the Amiga and the PC. The objects and scenes have been produced by some of the industry experts who produced the tutorials on Lightwave. The beauty of Light Rom 4 is in the simplicity of use with all the objects, surfaces and attributes loading automatically when the scene file is loaded. All of the Lightwave objects and scene files are represented with thumbnail renderings for easy previewing.



KARA COLLECTION
OUT NOW
£44.95

Includes all packages previously published by Kara Computer Graphics for the Amiga, plus many more, in an exclusive and professional edition reorganised and enhanced by Cloanto. This CD-ROM contains 80 Color Fonts (including effects like brick, glass, chrome, chisel, etc.), 5 AnimFonts, hundreds of alternate colour palettes, Starfields, Plaquegrounds, and software for sfx in pics, animations, titling and presentations. All items for solo or combined use. The Kara Collection also includes two software packages developed by Cloanto to manage bitmapped fonts: ColorType for colour fonts and the Personal Fonts Maker for black and white fonts. Both have been acclaimed as the best in their respective fields. To make AnimFonts easy and enjoyable to use, an ARexx program was created for Personal Paint, which renders any string of characters into animated text.



SYSTEM BOOSTER
OUT NOW
£17.95

This collection contains all the tools to push the capabilities of your computer to the limits. Utilities can be started by simply clicking their icons with the mouse: No complicated de-archiving required. Most of the programs will run directly off the CD. All files on this CD can be loaded via an easy-to-use interface, allowing for quick and efficient access to programs and their documentation. Working with your Amiga will now be even more of a pleasure, since this collection contains all you need to finish off your projects in a snap. This CD should be an important building block of every user's collection.



CAPITAL PUNISHMENT
OUT NOW
£24.95

Capital Punishment, the astonishing beat em up of the year, received rave reviews in 1996.

94% – Amiga Games
95% – Amiga Computing
91% – Amiga Joker
95% – Amiga Action
90% – Amiga Format



Utilities Experience Volume One
OUT NOW
£8.95

Utilities Experience is a superb follow up to the highly successful AGA Experience series. Created using the same magic workbench ready to run environment as its predecessors. The Utilities Experience has over 500 meg of complete utilities including emulators, rendering utils, disk tools, graphics tools, loads of icons and tools, and loads more. Everything ready to run from the CD! (WORKBENCH 3.0 RECOMMENDED BUT NOT ESSENTIAL)



AGA Experience Volume 2
OUT NOW
£12.95

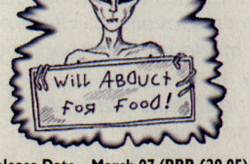
Since the covermount of vol 1, AGA Exp 2's sales have risen immensely. The AGA Experience 2 contains over 640meg of Demos, Games, Utilities, Slideshows, Pictures, Animations, Diskmags, Text Files, Rendering Files, Fonts and loads more! The main features on AGA 2 are the EXlusive products, such as demos of Capital Punishment, Nemac 4, XTreme Racing, Microlyte Warriors, Pinball Prelude, Watch Tower, AWeb, Blitzbombers, Worms and loads of other stuff.



aga experience volume three (out 3/97) – £14.95

Due to huge success of the AGA Experience Volumes 1 and 2, and the many requests we have had, we have decided to go ahead and produce another sequel, entitled. . . AGA EXperience Vol 3! AGA 3, again, will contain a similar content to its predecessors, including over 640meg of NEW software including Demos, Utilities, Games, Slideshows, Pictures, Diskmags (including the continued collection of Amiga Reviews), the best hand picked music mods, icons and loads more. All the software is brand new, downloaded from various BBS's and internet resources. The AGA Experience Vol 3 will be released in March 97 and will be released at a lower RRP of £14.99!





Release Date – March 97 (RRP £29.95)
pre-order price **£24.95**
SYS REQ: WB 3.0, 4mb, AGA or GFX Card Recommended



SAdENESS Software are proud to announce the coming release of 'The Hidden Truth'. Over the past year, we have been busy compiling what will be one of the most interesting and exciting CDROM releases of the year.

This CD is a massive HTML multimedia extravaganza! Featuring sound samples, movies, pictures, interesting text files and more. Covering a wide range of topics – ranging from UFOs to Serial Killers and Voodoo.

Superb Soundtrack from the incredible Canadian rock band – The Sci-Fi Prodigy. Including several exclusive tracks specially composed for the CD! Prepare to be amazed.

World Wide Web documents including HTML 3 features, such as Tables, Javascript, Custom backgrounds and colours, Image Maps, Gif Anims and more!

We have taken the time to ray-trace several headings and animations, to make this CD a joy to explore.

Featuring Gif Animations, AVI animations, Javascript, WAV/AU Sound samples, JPEGS/GIF pictures, HTML documents, MPEG/QUICK TIME movies and more!

Unlike many other CDROM titles today, we have virtually filled this CD to the brim, with only the best data around.

Also included are various bonus programs such as multimedia Roswell guides and paranormal databases and more.

This CD will be one of the best resources for anybody even remotely interested in Alien Life Forms, Unidentified Flying Objects.

Alien abduction cases and Close Encounters etc. With hundreds of informative and interesting files, a comprehensive UFO image gallery, some of the very best Web Sites, masses of quality animations and sound samples and more.

Government Coverups: Some of the most top-secret documents, pictures and files are here for you to see. Majic 12 UFO group documents, 'authentic' military UFO photos, and more – like some of the most interesting theories on the JFK assassination.

We have collected information about some of history's most evil people – from Adolf Hitler to Jack the Ripper.

From Independence Day to the X Files, some of the most popular Sci-Fi is featured. See movie clips.

Including detailed SETI information. Also, the very latest updates on the amazing news of fossilised Life signs found on a meteorite from Mars by NASA!

There are details about the World's greatest Science-Fiction artists! We have created a special exclusive H.R. Giger gallery!

And More such as disasters, witchcraft, crop circles, assassinations, space, time travel etc. etc.

Women of the Web

OUT NOW
£24.95





Women of the Web is an all new CDRom which is compatible with any AGA Amiga, PC or Apple Mac. It's an Interactive Multimedia Encyclopedia of over 450meg of Images, text related info, MPEGS, WAV and MOV files for over 250 female celebrities.

Women of the Web is displayed in superb HTML documents which can be viewed using any WEB browser, ie AWEB, Ibrowse, Voyager, Netscape etc. **(Web browsers included, set up for Amiga, Apple Mac and PC, ready to run).**

Cindy Crawford, Gena Lee Nolin, Pamela Lee, Helena Christensen, Niki Taylor, Stephanie Seymour, Gillian Anderson, Cameron Diaz, Teri Hatcher, Jennifer Aniston, Sandra Bullock, Liz Hurley, Demi Moore, Tyra Banks, Yasmine Bleeth, Elle MacPherson, Courtney Cox, Kimberley Davies, Claudia Schiffer, Uma Thurman, Salma Hayek, Sharon Stone, Izabella Scorupco, Halle Berry, Kylie Minogue, Jenny McCarthy, Linda Evangalista, Gabrielle Reece, Janet Jackson are just a very small amount of female celebrities featured on Women of the Web.

SYSTEM REQUIREMENTS: 4mb, 020, WB3



Write to Reply

Bud "The Amiga is not dead but only snoozing" Vennos finds himself replying to readers who are backing him to the gravestone in his "Keep the Computer Cemetery Empty" crusade and even getting to him in a telepathically Antipodean way.

Dear *AUI*,

I read with interest the letter in the March '97 (Write to Reply) issue of *AUI*, from Michal Bergseth, regarding the amount of PC news contained in *AUI*. In fact, being able to keep up with what's happening elsewhere in the computer world is one of the reasons I continue to buy *AUI*.

Just about the only other monthly I read is CU-Amiga. AF seems to be disappearing somewhere up its own arse at a frightening rate [Sorry that bit's unprintable] *[Unprintable? Yes, of course we would never print a remark like that even if we agreed with you that it was true.]* Since the sad decline of Amiga Shopper into what amounted to nothing more than a fly-sheet, and its ultimate relegation to a few pages in AF or PC Shopper, *AUI* is the only mag that offers a consistent outlook on what's happening on other platforms.

As someone whose only technical qualification is the ability to pick up the phone and ring one of two highly knowledgable mates, and then grovel for help to fix whatever it is I've managed to break this time, I find the articles easy to read and understand. Sadly, one of the two people mentioned above has recently switched to a Mac, but that's his loss...

I noticed that AF have recently asked for readers reviews on older, established software. A page filler, if ever I saw one.

By the way, Gino Ginelli Toffee Fudge - Half the price of Haagen Daaz, and almost as sexy.

Take it easy, and keep up the good work.

Paul Middleton
Cheshire

Dear Paul,

There is a genuinely difficult dilemma in this question of whether machine-specific magazines such as AUI should cover other platforms and technology that appear to be not directly of the nature of the original machine. It is certainly true that there is a sense in which owners of a particular computer not only receive information from machine-specific publications, but also get a feeling of community and hence loyalty from them. Readers learn about the ideas and problems of others who are involved in the same activities as themselves. And that produces one of the basic human values, a sense of solidarity with others that can be very pleasing and reassuring in this not always friendly world.

This wish list is reminiscent of rival phase 5's proposed Amiga extensions, and so far just as insubstantial.
Stephen Mangram, p.28

There is a Carole King song that offers the highly warming sentiment "You've got a friend." And it goes on to say "..when people can be so cold." That welcoming support is often a key element in the reasons why magazine buyers purchase publications, and it applies as much to AUI as any other.

Nonetheless, while those who buy magazines such as AUI want the very focused material that being machine-specific implies, it has always been a policy of AUI, in contrast to many magazines of its kind, and almost all Amiga magazines, to consider other aspects too. For example, though we have, from the beginning, been produced with knowledgable enthusiasts in mind, as therefore it is likely that many readers will be quite well-informed on matters Amiga, we have also had, except in the recent years of non-production of Amigas, a constant flow of new readers, some of whom are newcomers to the Amiga scene. They have need orientation to both the Amiga and the general technology field.

AUI also has had the view that Amiga users have in some ways been the cream of the, largely, home user crop, and the AUI readership the cream of that harvest too. AUI readers would not have bought the magazine if they had merely been games mad beat-'em-up fodder. So if our view of the reader was that he - and generally it was he - wanted to know more from an intelligent angle, then we should supply that information and those ideas that up to the time of reading it in AUI, he would, possibly, not have been aware of or even that he would not have been aware of wanting to be aware of. (You must be a an intelligent reader if you like sentences of that kind!)

It also true that we have tried, over the years, to keep AUI readers ahead of the computer game by informing you of what was happening or being planned on the wider computing scene. This was for your general interest, but it also offers you the ability to be sufficiently well-informed to make sensible choices in the very often bewildering field of technology.

That has meant, in recent times, following reasonably closely, events on the PC. We do that because that is the area where most activity is taking place. There is less need these days to report on mainframes, for example, because they are ceasing, in the old way, to exist. But the PC, however many of us may dislike or resent it, has become an ever more powerful influence on our lives.

As Amiga users and writers about the Amiga, we can and perhaps should be, enthusiasts and loyal to the computer. Nevertheless, we have to be realists and those whose devotion to the Amiga is so emotional and blind that they wish to ignore the PC and other similar developments are not only going to be made very unhappy by the changes that are and have been taking place and will continue to take place, but they will, inevitably, be brought uncomfortably in conflict with reality.

Hi again.

Yes, I know - you printed another letter from me only last month (January). Well,

here I go again (Who sang that? Sweet? Nah Iron Maiden? Naah. Ah yes! Scorpions! - never mind)

Right... I have a few comments to your "Chips that Made History". I for one think it's a brilliant series, especially since I want to do a project on the history of the (personal) computer. I study history. If you could only do a wider historic series I would take out not one, but several subscriptions! And to Michal Bergseth (and the rest of you) here is some interesting trivia that might help you in your seemingly religious war against PCs in general, and Microsoft specifically. A DJ on our national radio said the other night that the summed ASCII values of the letters in "Bill Gates" and "Microsoft" should be 666 in both cases. I haven't checked it since my hex/bin/oct/dec-calculator has lost the blue smoke. And, as we all know: computers work on blue smoke - once you let out the blue smoke they cease working! In any event - if it is true that it adds up to 666 then we MUST have God on our side and that would be quite reassuring - unless He pulls that nail-the-son-to-dead-wood trick again. However - until he does that or until he sends Mr. Gates and the other PC gods and demi-gods into the eternally burning pits of hell, I will dream on. Dream of a world where bill-gates is something that keeps the postmen from bringing me those much hated letters around the 1st of every month. A world where Microsoft is something used to stuff warm winter clothes, and where Win 95 is a stupid - but popular - agamous on the telly. I guess that's where I want to go today!

I think you'll agree with me that DrawStudio is one of the most potent illustration packages available for the Amiga today.
David Ward, p.33

And now for a couple of pleads: If you haven't done so already, could you please make your SuperDisks available on your web-site? Perhaps not the "current" disks, but those from the month before. I ask because my January disks were faulty (at least #99) and it would probably be a bit expensive (if at all possible) to send the disks and a stamped S.A.E. all the way to the UK and back. I haven't checked your site yet (I share an Internet-account with one of my friends and it is his hours now) but if the disks are there then don't mind this.

Secondly: I seem to remember that P. Overaa has done some C or assembler articles in the past. Couldn't you run some more of that? I mean ARexx is indeed quite powerful, but it is hardly the language in which the next Alien Breed 3D2 TKG or the next Wordworth will be written!

Phew! Well, that's all folks! And keep the faith... Now who said that? Slade? Naah... Sepultura? Naah... Hmmmm... Bon Jovi perhaps? Naaah, he's not that deep.

Soren Schilthauer
Denmark

Dear Soren,

Beginning and ending with a musical allusion... That sounds like a very literary and interesting way to treat a letter to a machine-specific magazine - see the previous letter in this Write to Reply.

The series on Chips that Made History is unquestionably a highly informative and interesting way of presenting this useful material. It is just the kind of material that does give such readers as yourself background knowledge of how the Amiga came to be the way it is and what might make it and other technology move in any particular direction.

Your pleads(!). I think I can confidently say that any Website that AUI would maintain would come to have a more important role in the interface between the magazine and its readers. We already receive a substantial amount of contact over the Net. You own letter, for example, reached us via email.

The SuperDisk material could well be in some way made available through the Net which would save the costly and environmentally unnecessary use of disks. In the meantime we are sending you the disks with which you had trouble.

As for ARexx versus Assembler, your comments will be read with interest by the Powers that Be, including Paul Overaa, and it could be that your pleadings will soften any dogmatic defences of ARexx that might exist.

I would not want you to think that we in any way support a Jihad, a holy war, against the PC, far from it. Yet it has always seemed an enormous pity that the ease of computing that the Amiga affords has been blocked by the sheer marketing power of the PC makers and Microsoft.

666? Could be, but I thought that stuff died out with the Great Beast, Aleister Crowley, in the Thirties and more recently in its revival when people went nutty playing heavy metal records, from groups with names like Iron Meatball, forwards let alone backwards.

Hello *AUI*

I am glad to inform you that it was a success. Hundreds of Amiga owners have emailed CNN and now CNN plan to cover the Gateway Amiga 97 Show and are working with Amiga Atlanta.

This means that one person can indeed make a difference. Just a small idea of mine turned into quite a campaign and so many people emailed CNN that I was personally asked to stop people from emailing them as they were getting too many emails and got the point. So one person can make a BIG difference. The Internet offers the opportunity to anyone living anywhere to take a step and do something.

I live in deep darkest Africa, well just in South Africa in a small third world town. So if someone in Africa can do this, then anybody can. Now I am doing the same, but I will be emailing other media centres and magazines. I thank all of you who have participated in emailing CNN, but don't stop. I challenge every single Amiga owner to do the same, I can guarantee that it will work, it did for me!

Cade Hannan
South Africa

Almost any standard Amiga monitor can be used although the old Commodore 108x series monitors are not recommended.
David Ward, p.37

Dear Cade,

There are times when, in spite of the trials and highly frustrating tribulations of this crazy world, a warm glow creeps over the declining physique. (And I don't mean the feeling of finding, in bed, a warm naked body to snuggle up to in the depths of winter after a hard day at the Write to Reply answers desk. The question that then pole vaults into the mind is "Whose is this naked body, and will the Abbot find out and make the succubus leave the monkish cell in which your Bud has vowed to spend his days and, especially, nights?")

No, the warm feeling is of pleasurable achievement. We - or rather you and AUI - have moved the apparently immovable world. As the "Pick yourself up" song says, "Nothing is impossible." You, by your faith and determination, have "made it happen". You have made a powerful media organisation bend to you and all those other Amiga users' will. That's something of which you should be proud.

There are a few things in life of which I am proud. One that has nothing to do with computing is that I, with the help of others, enabled a group of multiple sclerosis sufferers remain in their residential home when some National Health Service bureaucrats following their political masters idiotic commands wanted to knock the place down. Then too we had to take on the might of the Establishment and, as you did, beat them by not much more than determination.

My gratitude and admiration and doubtless that of Amiga users around the

Write to reply

CONTINUED FROM PAGE 87

world goes out to you. I am really glad that AUI was able to play a part in what you achieved. But the real heroes are you and the others who helped. For once it is my pleasure to say to YOU - Keep up the good work.

Dear *AUI*,

I downloaded a slideshow at the weekend which claimed that Duke Nukem 3D was being ported to the Amiga! Now I'm not convinced, but I haven't followed the games scene too closely in the last 6 months and was wondering if it were true?

Oh, is there any news of Championship Manager 2?

Finally, does the mag allow free adds? The BBS I'm in has just started supporting the Amiga and I'm looking for new users to join up and check it out.

'If speed kills then Windows users will be around for ever!'

'Windows isn't a virus, viruses do something!'

Co-Sysop of CELLUAR BBS on 01604 757777. 24 hours a day

Best Regards,

John Porter

email:johnp@cadlink.co.uk

With Commodore making lots of noise and little else, Power Computing's market was becoming almost stagnant.
Ashley Cotter-Cairns, p.40

Dear John,

On the question of Duke Nukem. While I can't say for certain that there won't be an Amiga version, I will bet my next month's salary - if I get any - to an orange made of china or even brick, that it won't happen. Games companies are in general run by people who think they know what's going on and show it by wearing trendy double breasted suits - or now four button single breasted suits which look totally ridiculous on them and anybody else - and drinking themselves blotto at tawdry so-called nightclubs during trade shows. They manage their business on the basis of hopping from one latest ripped off idea to the next. Originality would be wasted on them, at least the largest part of their population, and if there is a sense that a computer isn't getting millions stuck behind it in the most obvious way then even if there is a solid audience for it, two years or more before that audience is even thinking of going away, then they will follow the fashion for dropping that computer from their schedules of games in production faster that you would put down one of those glowing ingots that comes out of steel factories.

Duke Nukem? To get that onto the Amiga would cost many man years of work and need enthusiasm and expertise in marketing it. Most games people wouldn't do it just because their peers (sic) would look at them as if they were a gigabyte short of a hard drive and they would never want to be thought untrendy by the other trendies who have been, in their dim minds, convinced by the same spurious arguments that the Amiga has for three years had no real market for games.

That may actually be sadly true now, but it has been a largely self-fulfilling prophecy. That's why it happened, because stupid people said it was going to happen.

Championship Manager 2? Whatever happened to Domark who were going to bring it out? They went the way of all stupid computer flesh and unthinking circuits and I would guess that Championship Manager 2 went with them.

"If speed kills then Windows users will be around for ever!" I love that. When I use an Amiga for simple tasks and it moves so smoothly and with so little fuss, I gnash my two remaining teeth - can you hear the sound of one tooth gnashing? - at the futility of trying to get this world to think of quality and not profit.

Dear *AUI*,

I take to my keyboard once again to express what I'm feeling today of the Amiga situation.

I don't know what to think about all the news about the future owner of the machine. It sounds to have many companies interested in the Amiga and that they're ready to fight to get it. But isn't it a storm in a teacup? Tell me if I'm wrong but magazines talking about computers in general are not talking of the Amiga nor about the battle you're describing in your pages.

Each month when I read *AUI* I have another hope. Each new hope cancelling the previous one. It's like a never ending story, and although I'm an enthusiast user of the Amiga, I'm wondering if we are not just exaggerating the possible revival of our beloved machine. I think we are not fighting on the right battlefield. It's useless imagining a superb machine with a powerful processor, loaded with tons of RAM... If the software companies released news like the game "Creatures" even for the plain A1200, I'm sure that they'd sell thousands of copies of it and would contribute to one more standard on the market.

In my job (imaging communication, web designing...), I sometimes talk about my start in the computer field and I say that the Amiga was one of my first machines. I say that I'm still using it in DTV. And the answers to that are often: "I got an Amiga too some years ago, but I don't use it any more". So it is probably somewhere in a cupboard, ready to be used again if a good piece of software is released.

Do you know that we spend nights on such a simple PD game like Scorched Tanks with my friends who are PC users? They'd like to have an Amiga at home they told me.

THIS MESSAGE IS FOR THE COMPANIES REALLY INTERESTED IN OWNING AN AMIGA AS A MASS MARKET MACHINE: MEET THE SOFTWARE COMPANIES WHO CREATE SUCH WANTED GAMES LIKE "CREATURES" AND HELP THEM TO RELEASE AN AMIGA VERSION. IF YOU MANAGE TO DO THAT, WE'LL HOPE AGAIN AND WE'LL BELIEVE IN YOU. COME BACK WITH SUCH A CONTRACT AND YOU'LL DESERVE THE AMIGA!

David Merrheim
Lille, France
Email: dmerrheim@nordnet.fr

The sheer quantity of Amiga workstations is amazing. It's an Amiga heaven!
Steve Bowie, p.42

Dear David,

*Why is it always true that we are right and others are wrong? Am I being dogmatic, as a girl accused me of being the other day? There these people who say as you comment, that they used to have Amigas and now don't. We can't blame them. They are victims of this illogical world in which we live. throw away your Amiga, they have been told. The perfectly good machine is now no good. "No good" is the favourite expression of my Uncle Jack, who has been thought to be for years the only buyer of all the thousands of **AUI**s that are printed and distributed and, that in support of his dogmatic nephew, has been buying them up burying them in his garden. I can authoritatively deny this has been true for some time.)*

You are right too - it's nice to know that I'm not the only one in the world in possession of what I believe is called "emotional Intelligence". It is software that makes people want hardware and the first task of anyone mad enough to take on the Amiga at this stage in its sometime chequered flag career would be to get the software developers to create the special packages that would bring life back into this old and possibly flogged out horse of a different colour.

Do you believe that anyone who does get the remains, even the ashes of the Amiga, will have the wherewithal or the guts or Nous or common sense - is that the same thing as Nous? - to do that? Oh look, there go those swine fluttering their wings past my windows. It could be ham for breakfast again, but it will take pockets as deep as the Cheddar Gorge caves to bring home that kind bacon from the flying porkers or the pigs' trotters of a mess that the Amiga is in.

It's about time Kyocera came to be a better known name in Amiga circles.
John Russel, p.44

Dear *AUI*,

(Reply to reply to letter printed in last month's *AUI*. Bud Vennos: "John Kennedy went off from *AUI* and, if my memory serves correctly, took a masters degree in computing.")

Before working at *AUI* I was co-editor of Amiga Computing. I left that magazine when the company decided to spend thousands re-launching an Atari magazine (instead of Amiga Computing) into what I considered a dead market. I could see no future for such a short-sighted company. I believe it's under different management now.

When I left *AUI* (which I did for personal reasons) I studied for a Masters in Electronic Engineering, at Queens University Belfast. However, a lot of the course was taught specifically about the Amiga (I can show you the notes) by an extremely knowledgable professor. The course was looking at different PCs, and concentrated on two: the Intel based systems, and the Amiga with its 68k and custom chips. I passed that course!

As far as the future of the Amiga goes, I really hope it has one. That said, I'm not going to become locked into it forever. I've had other computers: ZX81, Jupiter Ace, Amstrad CPC, and when the time came to move on, I did. I have to, I make my living writing about the most popular machines at the time.

Now, looking at the state of the Amiga market, it's pretty clear to me that it has died and is starting to stagnate. I still use my Amiga every day, and wouldn't be without it. But I know when to move on.

I'd also disagree with the part about me being "pleasant".

John Kennedy

Dear John,

You are entitled to correct the matters of fact about your career and even to express opinions about the Amiga past, present, and future. So too are the readers. They often - and I don't think unreasonably - expect those who write about the Amiga and earn money from that writing to feel the same way they do about it. Whether that happens is up to the individual publication and writer.

There is a dichotomy between what we may feel is what we would want to happen and what is in reality happening. I say "in reality" because quite often we are unable to distinguish between reality and our view of it. The dangerous thing is when our position of influence puts us into a situation of being able to influence the reality of others.

How do you think others feel when, though they and you are using the Amiga every day, you say "...it's pretty clear to me that it has died and is starting to stagnate." What is the definition of the death of a computer? That it is no longer being used, or that some people, software people or journalists, think it doesn't have a role in their lives? What does stagnate mean, that no advances are being made or that it offers no service that can be of growing aid to those who use it? That is not the case.

Dead? Pushing up the daisies? Kicked the bucket? I am writing this on an A1200. The words will, I trust, reach thousands of eyes, including possibly your own. Dead? It may be professionally definable as so, but for those thousands, and even you, we should not let ourselves be convinced by the superficialities of the market or marketing, the wastefulness of the consumer society, to believe everything because others have been brainwashed into some conviction.

*I apologise for categorising your reputation as being "pleasant". According to my information that was what was thought of you. Perhaps that was another John Kennedy who worked at **AUI**.*

Dixons acknowledged the cable splitter was faulty, but disputed the interim payment of £20,000 awarded to Wood by the Court.
Antony Mael, p.52

Dear *AUI*,

In response to Gavin Gunn's plea for a requester patch to provide a 'Deny' button on disk access errors, while I am regretfully unaware of any such patch, I feel it should be mentioned that the number of retries can be set to other than 10 by use of any Trackdiskprefs program, such as that provided by the very wonderful MCP everything-patch, and the older MultiCX multi-function commodity. And probably most other multi-function commodities.

Also, Re: Your response to Colin Napier that there is no cheap and easy way of networking the IBM and the Amiga, I find it strange that you did not mention PC2Amiga (Aminet shareware) now v3, which can do just this thing via the parallel port, giving the Amiga full access to all of the IBM's drives via a commodity running on said IBM. Especially strange, considering that unless I be mistaken, you once included Version 2.x of this on your coverdisks?

Now while we're on a let's-improve-the-coverdisks spree, as an Expert user by your own classification, I'd greatly appreciate it if all .lzx files could be archived to expand into their own folders rather than wherever you happen to be when you decompress them. The coverdisk installer program could still expand them to floppy easily enough by diverting them through RAM: (Surely every Amiga now in use can fit an 880k floppy into RAM: on a clean boot?) and it would allow we knowledgeable ones to simply "Lzx x DF0:Archives/#?.lzx" into our assigned coverdisk expanding location and leave it to it, rather than having to progress one archive at a time and stop to clean up the mess made by Reality Kit games at regular intervals. Or you could use DMS for the floppy disk archives, on the basis that all expert users will have RAD: or FMS: disks available to them.

Oh, and on the subject of Lzx... 'Imdad Shah and his super SuperDisk team break another record to bring you 8 disks of..'? 'Another record equalled! Imdad Shah does it again'? Enough of this. I'm sure Imdad Shah, as good a coverdisk team supervisor as he may be, does not need such false ascriptions to bolster his ego.

What breaks these records is a combination of Data Compression Technologies' Lzx format, Klaus Deppisch's Diskspare high capacity Amiga trackdisk format, and sets of unusually compressible coverdisk contributions, and well you know it. As do I.

Besides, what does 'Eight disks of utilities!' mean? Generally, it seems, it means about 4.5Mb of stuff. All well and good, but isn't that actually equal to about five disks full of utilities? Or as I like to say it, 4.5Mb of stuff?

The average Pentium owner still thinks of 'An Amiga' as the 1Mb Slow RAM A500 with the pirate games collection they

Write to reply

CONTINUED FROM PAGE 89

parted with four years ago, and this encouragement to count things in terms of how many DD disks it decompresses onto can hardly be helping matters. Let's have that in new money, please. That or admit that those 8 disks are little over half full on average. I could almost call it dishonest, but I'll stick to 'overenthusiasm'.

Marc Forrester, via his mum's ISP.
Devon

An impressive 'Transputer farm' for the Amiga was demonstrated at Commodore's last World of Amiga show, but I've not heard of it since.
Simon Goodwin, p.59

Dear Marc,

*I love experts, though in my experience except when they are readers of **AUI** they are generally wrong. Lawyers, accountants, even doctors - but not of course, nurses and even ex-nurses, who they have told me that they cannot physically be incorrect, it's something to do with their training in dealing with psychiatric-help needing chaps like me that makes them so right. However, you are clearly one those **AUI** experts who get it rightissimo.*

Your hints and tips should be published in a magazine...Now I come to think of it they are being. So I thank you and will take your advice as they say in US legal cases on TV, under advisement.

I agree with you too - of course I understood every word of your technical stuff - about what the average Pentium owner thinks of us Amiga Neanderthals. (Recent discoveries seem to show that the Neanderthals were more intelligent than their successors.)

But, as for the number of disks and how full they are, the importance of that comes down to whether you think that what people buy magazines for is what's in them or what's on them. I agree we should be accurate and also that what is said to be there should be there.

Hi there...

I am just writing in response to the letter sent in by Gavin Gunn who wanted some sort of commodity that would allow a DENY option on requesters. I believe that MCP (available on Aminet) has this capability and also dozens more! If you have any hacks running on your system then the chances are they are built into this little beauty, so give it a whirl!

I hope this helps.

Keep up the good work...

Matthew James Scott
Lancashire
Email. hedgehog@zen.co.uk
Url.
http://www.zen.co.uk/home/page/hedgehog/captain.html

Dear *AUI*,

I read with interest your reply to Mr. Alan Barton's letter (*AUI* Mar 97), reference putting CDs back on the cover of your magazine.

Currently the covermount CDs available are Workbench orientated using 'Magic Workbench' and/or 'New' icons, which is adequate for most of the information as it is not of a 'multimedia' type anyway.

As you state, to make a CD anything like a multimedia item would require a great deal more time, work, and multimedia content.

Personally I think that a half-way approach would suit better. A Web browser (Ibrowse, AWeb, or Voyager) could be employed relatively easily and not require quite so much effort on time consuming graphics and a user interface, while still allowing multimedia type events to be run.

Most people are familiar with one browser or another and a commercial version, which could be Internet disabled, could be used as an effective replacement for 'Interplay' etc., while allowing complete/partial Web sites to be included easily (this would add to the overall effect of multimedia).

To this end, I would like to offer my services as a Web author (I currently run The Official Weird Science Reviews Site) and as an author for Interplay projects, when you do restart covermount CDs.

Some points for using a browser:

Universal familiarity with browser interface.

Easier than Interplay.

Smaller, easier graphics in a browser.

Quicker to alter with inclusions or exclusions.

Could obtain 'sponsorship' from Web browser company.

Could obtain 'sponsorship' from included Web sites.

Paul Wootten
Avon

Dear Paul,

Your suggestions make very interesting reading. You clearly are one of those Amiga experts on whom the rest of us can rely. Your ideas are being passed on to those who make such decisions that colour all our lives. I hope that they ake them up and will be in contact with you.

Dear *AUI*,

I'm a Brazilian AMIGA user and an avid reader of your magazine. As a musician and project studio owner I've been using my A1200 with a MIDI interface synced to a couple of Alesis ADAT's without glitches. When I wanted to get a new version of Blue Ribbon's excellent sequencer 'BARS&PIPES' the company sent me a letter informing me about the end of Amiga support and the availability of the Amiga related software for download by COMPUSERVE users,

free of charge. So I immediately became a COMPUSERVE member and downloaded the 'BARS&PIPES' plus a lot more that was available there. Now I have the (forever, sadly) final version of a very useful program. I'm looking for other people interested in BARS&PIPES and other MIDI and music related software for Amiga platform to exchange tips, information, and ideas. If we form a really big team, a home page and an online informative service may be an option.

Another thing is about a couple of demos I recently downloaded from Aminet called "Camouflage', a very Mac-looking powerful sequencer; and 'MSE', a very well done remote patch editor and librarian. I would love to see a publication giving some space to cover such important efforts to keep the Amiga a viable alternative to MIDI music computer world. The only complaint I still have about this platform is about professional direct-to-disk recording but who knows...

The Atari Falcon became an alternative computer for this kind of job. Maybe a more decent computer like the Amiga will do it properly if the software and hardware can be made available .

Congratulations for the very well done job and see you on next issue.

Alex Frias.

P.S. Publish my email, please, and forgive my bad English.

atfrias@ibm.net

Dear Alex,

Bad English? Your English makes my or the general English speaker amazed. How does anyone learn to command it so well when we most often command no other language at all?

You are right about the unpublicised musical abilities of the Amiga and I trust that you comments will make them better known.

And, as for the fine people at Blue Ribbon,

they did what many in the world should have done. Having made money out of the Amiga, they returned something to it, when they left it.

When designing Web graphics, colour is at a premium, and 256 colours are generally all you have to display everything...
Shelley Hannan, p.60

Hello there.

I am not sure if you are going to be having a stand at the World Of Amiga show in May, but I have a suggestion that will make you the flavour of the whole show.

Now what I am going to tell you I am not sure if you know, but if you don't please don't give me as the source for this info.

Okay. You know Gareth Chisholm, who is your layout designer? Do you know Ryan Hannan, who has done a few things for *AUI*? Do you know Shelley Hannan, who also does stuff for *AUI*?

Well, do you know what these three have in common? They are actually in a music band called "Voice Over Vision". They have been going for more than 10 years and have now started to really get involved in the music scene in London.

The reason I am telling you this is that they are avid Amiga users and lovers, and use the Amiga for everything from music to videos to short films to cartoons to DTP to Web designing.

How about asking them to perform a gig at your *AUI* stand at the World of Amiga in May? They want to start doing some live gigs and I am sure that no one has ever done this. Imagine all the hype and publicity it would cause.

They could have Amiga signs all over their stage and play some live songs. I am sure this would go down as a big hit.

They sound a lot like a mixture between Depeche Mode, The Cure, Suede, and all the 80's synth pop. They're really excellent. Find out about them and ask them about it?

If you want more info on 'Voice Over Vision' then you can go to this Website:

http://www.geocities.com/SiliconValley/Heights/9781

Here is all about the Amiga and them. It has all the info on how the band got started, background info, and some lyrics of some of their songs with clips from some videos they did. Go to the 'Voice Over Vision' page.

I hope that this might help in some way and I am sure they will love to help out somehow.

Anon.

Dear Anon,

*There we are! We never know whom we have in our midst. It could be aliens - Scots aliens, the trews is out there. It could be sufferers from Mad Cow Disease - those who vote again and again for idiots. It could be re-incarnations of Mozart and Rembrandt rolled into one like **AUI**'s designer Gareth, killer-diller rock man. Wonders never cease. As for putting them on live, are you sure you are not putting us on live? Mr. Anon, thank you for the revelation. they shall be exposed and possibly exploited.*

Dear *AUI*,

My titbit of help concerns Amigans having a video camera and wanting to do a bit of desktop editing. Some two years ago CamLink brought out the EditMate (for PC/Amiga) at £200. You may like to know that Keene Electronics, Derbyshire (Tel. 01332 830550) are selling this little bit of kit for £50. By present day standards it's a bit basic, but you do get Lanc/Panasonic 5-pin connection, infra-red wand, stereo audio mixer, microphone, and software controller on disk or CD-ROM.

Those of you worried about Channel 5 interfering with your enjoyment of videos will be pleased to hear that the VCR's built-in modulator can be retuned, or even switched off.
John Russell, p.39

While writing, may I make my own comment on the letter from Alan Barton, Macclesfield (March '97). Really! Some people are never satisfied. Mr. Barton, it seems to me, is more a collector of software than anything else. He claims to be a regular reader of five Amiga magazines. Strewth! What does he do with all that software? Eat it for breakfast?

Unfortunately, we (that is readers of computing magazines) have been spoilt with give-away software over the past few years and have become greedy. We have now come to expect more and more without giving much thought to its true value. Of course, the problem is in a way of your (that is the general Amiga press) own making. Encouraging, as you do, the readership to purchase for the sake of the software.

You spent nearly a whole page in your defence of Mr. Barton's letter. Personally I would have simply stated that the CD discs are not included for the very reason why Mr. Barton and I both buy *AUI* in the first place. That it is offers other things more important than a vast disc of software - good editorial content. That is you competitive edge.

John Reed

Attikis, Greece.

Dear John,

Thanks for your titbit, it will doubtless prove very helpful to those who are into video, especially those wanting to produce some of these home videos that make such entertaining viewing late at night when they are mixed up with Noddy movies by mistake.

*As for why so many people have bought **AUI** over the years. I hope you are right and it was for the good editorial content. I also hope it has given them some new ideas about all sorts of matters and not just the Amiga or computing. The world may be a crazy, but it is also a tremendously stimulating place, and a good example is the letters that have arrived for this column.*

*If you and others have found the editorial content of **AUI** worth paying for that is, as with the CNN story in the letter above, something that will give those who have provided it over the years faith that whatever they have done has been worthwhile.*

*As it goes in "Mack and Mabel" about the early film makers. We didn't know we were making art, just making a buck. It hasn't been quite like that, and it has been more than the desire for a competitive edge. There has been an attempt in **AUI** to make something different and worthwhile. And I thank you for saying that in some ways it has worked.*

Send your letters to:
Write to Reply
Amiga User International
Unit 2, Utopia Village
7 Chalcot Road,
London NW1 8LX

If you wish to send Email letter to Write to Reply or Amiga Answers, ***AUI*** can be contacted at **aui@bigfoot.com**

(Please include your full address.)

ARENA

To have your company entry in the AUI Arena, telephone 0171-586-7717 or fax 0171-483-1774

Amiga User INTERNATIONAL

CAPRI CD DISTRIBUTION

Commodore CDTV INTERACTIVE — ALL AVAILABLE TITLES IN STOCK — AMIGA CD32

225+ CD TITLES/150+ CD32 TITLES/80+ CDTV TITLES

NEW RELEASES

MOVIE MAKER VOL. 1 £29.99	ZOOM RELEASE £19.99
AGA EXPERIENCE 2 £19.99	HOTTEST 6 £19.99
EMULATORS UNLIMITED £19.99	AMINET 12 £14.99
AMIGA DEVELOPERS CD £19.99	MORE WORMS VOL. 1 £14.99
AMIGA UTILITIES 2 £19.99	SCI-FI SENSATION 2 £19.99
C64 SENSATIONS 2 £19.99	SOUNDS TERRIFIC 2 £19.99
WORKBENCH ENCHANCER £9.99	3D IMAGES £9.99
AMINET SET 3 £34.99	NFA UTILITIES EXPERIENCE £14.99
AMINET 13 £14.99	EPIC ENCYCLOPEDIA £29.99

BACK IN STOCK ★ HUTCHINSON'S ENCYCLOPEDIA £.99 ★

OFFER 1 ★ LOCK N LOAD £4.99 ★

OFFER 2 ★ CDPD 1 £4.99 ★

THIS IS JUST A SMALL SELECTION OF THE TITLES & SPECIAL OFFERS WE HAVE. PLEASE WRITE OR RING FOR THE LATEST LIST
(PLEASE SPECIFY WHICH MACHINE &/OR CD DRIVE YOU HAVE)

CAPRI CD DISTRIBUTION

Dept AUI02, Capri House, 9 Dean Street, Marlow, Bucks SL7 3AA (VISITORS WELCOME)
Tel/Fax: 01628 891022
TRADE ENQUIRIES WELCOME

MasterCard VISA

INSANITY PD

QUALITY AMIGA PUBLIC DOMAIN

000's of disks in stock!!! Including entire assassins collection, AMOS collection, clipart, fonts etc & many other games, utilities.

You name it, we can get it.

For full listings & a free game send 50p and an SAE for our latest catalogue disk.

For more information call (0378) 054637 after 6pm.

99P PER DISK

Cheques/P Orders Payable to A P Varley, Insanity PD 542 Grange Rd, Gilligham, Kent, ME7 2UH

BSB

Bruce Smith Books

New Books for your Amiga

Bruce Smith's Total! Workbench 3
The complete guide to Workbench on Amiga A1200 and beyond. The long-awaited follow-up to the best-selling A1200 Insider Guide. All aspects of using the Workbench are covered in depth with plentiful illustrations, practical examples and tutorials. Nothing is left unexplained.
ISBN: 1-873308-55-8, 416 pages. £19.99 inclusive.

Bruce Smith's Total! AmigaDOS
Suitable for any Amiga with AmigaDOS 3x- A1200, A4000 etc. AmigaDOS is built into every Amiga and learning how to use it can greatly enhance your use of the Amiga. Every AmigaDOS command covered.
ISBN: 1-873308-56-6, 512 pages, £21.99 inclusive.

Paul Overaa's Total! Assembler
The complete and up to date guide to writing superb programs for your Amiga. Follow the step by step examples (all provided on disk) and you'll soon master Amiga assembly language programming techniques. ISBN: 1-873308-57-4, 512 pages, two disks, £24.99 inclusive.

UK Comms - Internet and More
This is the complete computer communications book with everything you need to get started and progress in one easy to use package. Written by John Kennedy and Darren Irvine.
ISBN: 1-873308-40-X, 320 pages, £19.95 inclusive.

BSB - Masters of Amiga
Practical: Real examples with no detail left out and no assumptions made; step by step tutorial text with examples and illustrations at every important point; great design to make information easily accessible. **Useful:** Comprehensive reference material fully indexed and with no stone left unturned; programs, routines and utilities on disk; technical appendices, bibliographies and glossaries. **Reliable:** The best authors, regularly updated; Amiga developer status.

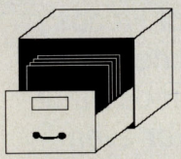
Bruce Smith Books publishes a complete range of books for your Amiga. Whether you run a secondhand A500 or an A4000 040 we've got a book for you.
Send or ring for a free catalogue.

24 hour credit card hotline:
01923 894355

Cheques/POs/cards to:
BSB, Freepost 242, St Albans, Herts, AL2 3BR

❊ AMIGA PD – ALL models ALL versions ❊

The KEW=II Collection



P.O. Box 672
South Croydon
Surrey CR2 9YS
Tel: 0181 657 1617

Public Domain and ShareWare
– fully tested, documented and virus free!

THE LEADER
– OTHERS CAN ONLY FOLLOW!

The LATEST in PD and SHAREWARE!
PLUS! Free help & advice by post or telephone - anytime.
❊ Written Help! sheets.

FREE P&P

❊ Edited & Printed docs.
❊ YOU choose the programs WE make you YOUR disk.
❊ 1-3 FULL disks £1-50 each.
❊ 4 plus disks £1.25 each.

UNIQUE 'Pick Your Own Programs' for FULL DISK VALUE!

❊ FREE CLUB MEMBERSHIP ❊
INFORMATION PACK &
CATALOGUE DISK only £1
❊ Including the LATEST Virus Checker & FREE updates ❊

Siren

Dept. AUI 99b London Road, Gloucester, GL1 3HH.

Presents....

Lottery Winner Pro III *For only £5.00*
80% Amiga Shopper Xmas '95.

Grime - *Only £4.99*
THE map editor. 94% "Star Buy" Amiga Shopper Xmas '95.

LightSpeed - *Only £4.99* (2 Disks)
Sublime Software present the ultimate Tron/Tag game. 1.5MB

Smart CardZ - *Only £3.99*
Klondike for non-AGA machines. Dozens of converted cardsets.
All prices include p+p. We are offering up to 50% royalties !

Please make all cheques payable to **SHOAH**

Amiga User International ARENA

To have your company entry in the AUI Arena, telephone 0171-586-7717 or fax 0171-483-1774

Multi Media Computers

Established 8 Years

Amiga Specialist of Devon

100's of Game Titles

ie Alien Breed 3D £10.00
Powerdrive £5.00
Dungeon Master 2 £14.99
Capital Punishment £24.99

CD32 Games From £5.00

New Stock Daily
Ring now for free list

7 Tor Hill
Union Street
Torquay

Phone/Fax
01803 290055

FUTURE PD

Dept AUI02, 64 Stapleford Road, Luton, Beds LU2 8AY
Order line: 01582 36157 – no credit card needed

FREE FREE FREE FREE FREE FREE

- Voucher for **7 FREE PD DISKS** sent with 3 disk catalogue
- Catdisks **FREE** with any order or send 3 x 1st class stamps
- **FREE P&P** 1st class & **FREE GIFTS** on cd's & licenseware:
  Mouse mat (worth £2.50) 4 TDK disks (worth £2.50)
  90 disk labels (worth £2.50) £1 off each cd

SHOAH LICENSEWARE

- TDK disks (no extra cost)
- Order two titles and pick a free gift from above

Smart Cardz - klondike for non AGA machines - £3.99
Grime - The 94% Best Buy game map editor - £4.99
Lottery Winner Pro 3
80% Amiga Shopper - £5.00

PD DISKS
16,000 titles

1 to 9 45p | 30+ **30p** per disk | 10 to 29 35p

TDK disks add 10p

Aminet Pick & Mix Archives - from **15p** each!

LATEST CD'S - only £17.50
= Pick one free gift per cd

AGA Experience 1 or 2
Zoom 2 Utilities v2
Hottest 5 or 6 Epic Collection
17 bit 5 LSD 1, 2 or 3
And many more - see catdisk

GUARANTEED

- Only quality DSDD disks, no unreliable, damaging HD disks
- Next day despatch by 1st class post (75p P&P) or get a refund
- No quibble replacements

10 DISK PACKS - only £2.40 FREE P&P

Big Name Games	PD Mix 1 or 2	AGA dreams (demos & games)
Platform Games	Mixed Fonts	Assins Games Packs
Kids Pack	Education	Arcade Games

Klondike Card Sets, chose your own theme – add 50p. . .
. . . + another 150 in catalogue, please specify your workbench.

Cheques payable to M Wood please

KOBRAHSOFT QUALITY PD

Don't get bitten by buying cheap, poor quality PD. We sell the best. If we haven't got what you want, please tell us and we will get it. We have over 5000 titles available, so we should have something to interest YOU! We pride ourselves on our speed of delivery - we try and send out every order on the same day it is received - no waiting for DAYS. We accept payment by cheque, PO and Access and Visa. To give you an idea of what we stock:-

UTILITIES	GAMES
MIDIPLAY - plays music modules	MISSILES OVER XERION
MOST V1.56 - Text Viewer	NIBBY 2
INPUT LOCK V1.1 - Security Lock	MUTANT PENGUIN
CHARACTER GENERATOR	MULTI TETRIS
DMS V2.03 - Data cruncher	TIME RUNNERS 17
MIDSPOOLER V1.2 - DIR Utility	RUNNERMINE 6
CD PLAYER V1.1 - Plays your CD's	MORTON STRIKES BACK
A BACK UP V4.03 - Back up utility	SPIDERMAN 2
ADAM V3.0 - Calculator	DEADLOCK 8
VIRUS CHECKER - Detects viruses	SPACEBALLS
CALENDAR - Super Calendar Prog	DONKEY KONG
POWERCALC V1.5 - Draws graphs	FLIGHT OF THE INTRUDER
TURN V4.0 - Latest Comms program	MEGABALL
POWERPLAYER V4.0 - Music Util	STEWARDS ENQUIRY
RECALL V2.3 - Diary program	GALAGA 92
SCHEDULER V1.2 - Organiser	DEFENDER

We have hundreds more games and utilities and also:- DATABASES, GRAPHICS, ANIMATIONS, SLIDES, MUSIC AND SOUND DEMOS, EDUCATIONAL PROGRAMS, FONTS, CLIPART, BUSINESS PROGS.
We also stock a wide range of Spectrum and Sam Utilities.
Prices: Disks £1 each, or send for free CAT disk or order to:
KOBRAHSOFT, Pleasant View, Hulme Lane, Hulme, Longton, Stoke-on-Trent. ST3 5BH
or phone 0178 230 5244. We also take Access and Visa P+P UK Free Others £1.50

PenDragon PD

50 Binbrook Way, Willows Estate, Grimsby, S. Humberside DN37 9AS
Tel: (01472) 886386

We stock Fred Fish, Assassins, 17Bit, Scope, TBAG, NZ, Arug, Demos, Games, Fonts, Music, ClipArt, Slide Shows, Animations, Game Cheats and more.

Accessories: Blank Disks, Flip Top, Mouse mats and Mouse houses. All at reasonable prices.

Send 2x 1st class stamps to receive a catalogue disk.

Public Domain prices are		
	1-10 disks	£1.00 each
	11-20 disks	£0.95 each
	21-50 disks	£0.85 each
	Over 50 disks	£0.80 each
	Over 100 disks	£0.70 each

Plus 75 pence Postage & Packing on PD disks per order

AMIGA BOOKS FROM DTBS

Mastering Amiga Beginners (WB 1/2) ... £9.95	1.3) ... £9.95
Mastering Amiga Beginners (WB3) ... £19.95	Amiga ROM Kernal: Includes (2nd Ed. – WB 1.3) ... £14.95
Mastering AmigaDOS 2 Vol 2 (Reference) ... £19.95	Amiga Hardware Ref. Manual (3rd Ed. WB 2) ... 25.95
Mastering Amiga Printers ... £19.95*	Amiga ROM Kernal: Includes (3rd Ed.) £34.95
Mastering Amiga System ... £29.95*	Amiga ROM Kernal: Libraries (3rd Ed.) ... £34.95
Mastering Amiga AMOS ... £19.95	Amiga ROM Kernal: Devices (3rd Ed.) £25.95
Mastering AmigaDOS 3 Tutor ... £21.95*	Amiga Real-Time 3D Graphics ... £14.95
Mastering AmigaDOS 3 Reference ... £21.95	Computers & Chaos Amiga Edition ... £14.95
Mastering AmigaDOS Scripts ... £19.95	Amiga Game Makers Manual ... £16.95
Mastering Amiga Programming Secrets £21.95*	Amiga BASIC: A Dabhand Guide ... £15.95
Amiga A1200 Beginners pack ... £39.95	Secrets of Frontier Elite ... £9.95
Amiga A1200 Workbench Pack ... £39.95	Total! Amiga Workbench 3 ... £19.99
Amiga Gamers Guide Vol 1 ... £14.95	Total! Amiga AmigaDOS ... £21.99
Amiga A600 Insider Guide ... £14.95	Total! Amiga Assembler ... £24.99
Amgia A1200 Insider Guide ... £14.95	Total! Amiga Workbench ... £19.99
A1200 Next Steps ... £14.95	Total! Amiga DOS ... £21.99
Amiga Disks & Drives ... £14.95*	Total! Amiga Assembler ... £24.99
Amiga Workbench A to Z ... £14.95*	
Amiga Assembler Insider Guide ... £14.95*	
Amiga Hardware Ref. Manual (2nd Ed. – WB	

**free companion disk supplied*

FREE postage in U.K. Europe airmail & Worldwide surface mail add £1 per item. Airmail outside Europe add 25%
Access & Visa orders accepted. Tel/Fax 01706 812 800
Send SAE for descriptive catalogue.
We also support the Commodore-64 – send for list and stock a vast range of PC books.
DTBS (Dept AU02) 7 Castle Lane, Todmorden, Lancs OL14 8AF
Tel/Fax: 01706 812800

ARENA

To have your company entry in the AUI Arena, telephone 0171-586-7717 or fax 0171-483-1774

Amiga User INTERNATIONAL

CLASSIC AMIGA PD SOFTWARE

£1.00 per disk

Buy 10 get 3 FREE

BUSINESS

BU15	Pretium Accounts	+•
BU27	Invoicer	+•
BU28	Text Engine 4.1	+•
BU93	Letters	+•
BU98	Final Accounts	+•
BU90	Nucleu 3	•
BU66	Pelican Press DTP (3 disks)	+•
BU61	100 Printer Drivers	5+•
BU58	Label Maker	5+•
BU33	Easy Calc	5+•
M23	Resume Writer	5+•
BU13	Little Office	+•

DEMO/MUSIC

DE200	Delitracker 2 HD	•
DE206	The Garter Music 2 disks	+•
DE202	Mods 32	+•
DE174	Hypnosis Demo	•
DE158	Satisfaction Guaranteed	+•
DE155	Planet m	•
DE125	Sonic Drum Kit 2	+•
DE46	Bomb Motion 2 disks	•
DE05	Some Justice	+•

EDUCATIONAL

ED118	Exploring The World 2 disks	•
ED01	Highway Code	5+•
ED115	bethanys Z00	+•
ED104	Dinosaur Trivia	+•
ED93	MS Astrology	+•
ED37	WB3 Tutorial	•
ED82	Ancient Rome	+•
ED62	Beginners Typing	+•
ED57	GCSE Maths	5+•
ED46	States of Europe	5+•
ED31	Little Traveller	5+•
ED30	Internet Guide	•
ED18	Back To Skool	5+•

UTILITIES

UT158	Mui V3.6 LHA/HD	•
UT161	Print A Card	5+•
UT156	Tetra Copy	5+•
UT135	Virus Z 1.36 HD	+•
UT121	WB3 Datatypes	•
UT106	WB2 HD Installer	+
UT107	WB3 HD Installer	•
UT103	Disk Salv V2	+•
M2	Magic WB HD	•
UT77	Iconian 2.98 HD	•

NAUGHTY SLIDESHOWS

SS84	Manga Slideshow 7	•
SS80	Hot Tarts 97 3 disks	•
SS79	The Secretary 3 disks	•
SS78	XXX Calendar 97 3 disks	•
SS77	Black Beauties 2 disks	•
SS76	Bordello Queens	•
SS64	Beach Bunnies 2 2 disks	•
SS52	Sex Queens 96 2 disks	•
SS45	Wet 'N' Wicked	•

GAMES

G446	Beasties 2	+•
G445	Super Ball 2 HD	•
G444	Santa & Rudolph HD	•
G437	Pacman 96	•
G428	Rock	+•
G422	Mega Typhoon	+•
G413	Fightin' Spirit	•
G412	Rocket2 V2.28	•
G411	Keiths Quest	+•
G260	Monopoly	+•
G86	Scrabble	+•
G410	Marryampic HD	•
G407	Tetris Pro	+•
G403	Playstation Cheats	+•
G401	Aerial Racers HD	•
G391	Casino	+•
G387	Tetris Sex Special	+•
G378	World Golf	+•
G360	Slider 2	+•
G332	Friday Night Pool	+•
G287	Ruffian	+•

CD-ROMS

Aminet 16	£12.99
Personal Paint 7	£29.25
Magic WB Enhancer	£9.99
Aminet Set 3	£29.25
Wordworth 6	£34.99
Multimedia Toolkit	£7.99
Wordworth 6 Office	£44.99
Amiga Desktop Video	£12.99
Epic MM Encylopedia 4meg	£19.99
Into The Net	£18.25
World Atlas	£24.25
Women of the Web	£22.50

HARDWARE
Hard Drives
Memory Expansions
CD-ROM Drives
CD-32 Games
Commercial Games

NEW FOXES
A mm presentation. Discover the world of the fox – cute and cuddly or vicious killer. . . find out in this sup disk.

ALL PD DISKS
£1.00 each. Order 10 get another 3 FREE.
Post/Packing 75p per order
5 = A500 + = A600 • = A1200

CATALOG DISK
Send SAE or sent free with first order. Quote AUI.
Updated weekly

SAME DAY DESPATCH

11 DEANSGATE
RADCLIFFE
MANCHESTER M26 9YJ
0161 723 1638

SHOP OPEN 12-9PM 7 DAYS

North Staffs PD

. . . your friendly PD library
. . . for all the best in Amiga PD

Our disks are only 50p each

Send an SAE for your FREE Cat disk to:
North Staffs PD, PO Box 476
Stoke on Trent ST1 2JY
Tel: (01782) 279670

it's the service that counts. . .

To advertise in the Arena Section phone Nick Martin on 0171 586 7717

Arrow Pd

For two disk catalogue send three 1st class stamps or a cheque for 75p. Choose either FREE GAME or CD catalogue. Please state Workbench version.

PD TITLES (99p per disk)

7569: Gox-Fruit machine game (1) Any
8002: Rescue Elvis RPG (1) WB2+
7642: Monsters of Terror (1) AGA
7649: Wheelbarrow Sim (1) AGA
7610: Gemz (1) Any
7651: SuperUtils 8 (1) WB2+
7655: EasyPrint (1) AGA
7556: Belle's Paint (1) Any
7431: VirusZ (1) WB2+
7435: UK Demo Creator (1) Any

COLLECTIBLE CARD GAMES

Magic: The Gathering
Gift Box £14.99
Everything for two people to start playing
Ice Age Starter Deck £6.75
Ice Age Boosters £2.20
Alliances Boosters £1.90
Star Wars Ltd Ed Starter £5.99
Stars Wars Ltd Ed Boosters £2.25
Coming Soon! X-Files CCG
For details and complete list see our Cat disk.

PROGRAMMERS WANTED

We have started up a licenceware scheme under the name of ***Arrow-Dynamic Software*** and we are looking for high quality software. So, if you are interested in earning an excellent royalty then please get in touch and ask for our FREE Programmers Information Pack. You have nothing to lose but you could have a lot to gain.

COMPETITION TIME

To celebrate the launch of our new licenceware scheme, we are running a competition for all you programmers out there. We are offering prizes for the best three submissions. In addition, the winner will have their program released as an 'Arrow-Dynamic Software' title. Get in touch today and ask for a free entry pack. What are you waiting for? Get programming!
(Closing date 31.03.97)

P&P 70p on any sized order.
Cheques made payable to Arrow Pd.
ARROW PD, P.O. BOX 7,
DOVER, KENT. CT15 4AP
24 Hour Ordering Hotline: 01304 832344
e-mail: pj@arrowpd.demon.co.uk

Amiga User International ARENA

To have your company entry in the AUI Arena, telephone 0171-586-7717 or fax 0171-483-1774

NO HIDDEN EXTRAS

ASIU 001 Assassins Mega Boot Utilities
ASIU 002 Assassins Label Printers
ASIU 003 Assassins A1200 Fixdisk
ASIU 004 Assassins Handy Tools 1
ASIU 005 Assassins Handy Tools 2
ASIU 006 Assassins Handy Tools 3
ASIU 007 Assassins Multivision 1
ASIU 008 Assassins Multivision 2
ASIU 009 Assassins Audio Magic 1
ASIU 010 Assassins Audio Magic 2
ASIU 011 Assassins Audio Magic 3
ASIU 012 Assassins Audio Magic 4
ASIU 013 Assassins Music Volume 1
ASIU 014 Assassins Music Volume 2
ASIU 015 Audio Magic Soundtrackers
ASIU 016 Multi Print V1
ASIU 017 Multi Print V2
ASIU 018 Video Titlers Utils
ASIU 019 Multi Print-4
ASIU 020 Audio Magic 7
ASIU 21 Audio Magic 8
ASIU 22 Audio Magic 9
ASIU 23 Audio Magic 10
ASIU 24 Home Manager
ASIU 25 Disk Archivers
ASIU 26 Multi Vision 6
ASIU 27 Multi Vision 7
ASIU 28 Multi Vision 8
ASIU 29 Audio Magic 12
ASIU 30 Disk Helper 5
ASIU 31 Disk Helper 6
ASIU 32 Disk Helper 7
ASIU 33 Disk Helper 1
ASIU 34 Disk Helper 2
ASIU 35 Disk Helper 3
ASIU 36 Disk Helper 4
ASIU 37 Office Helper 1
ASIU 38 Office Helper 2
ASIU 39 Virus Killers
ASIU 40 Workbench Tools
ASIU 41 Multi-Print 3
ASIU 42 Programmers Utils
ASIU 43 ASI-Crunch-Copy II
ASIU 44 Multi Vision AGA
ASIU 45 Multi Vision 3
ASIU 46 Multi Vision 4
ASIU 47 Multi Vision 5
ASIU 48 Audio Magic 6
ASIU 49 Audio Magic 11
ASIU 50 A1200 Fix Disk 2
ASIU 51 Fix Disk V3.0
ASIU 52 Icon-Designers

A1200 Utils:

U059 Kickstart 1.3+ this will make you 1200 think that it is a 500
U315 Magic Workbench give your workbench a whole new A1200
U471 A1200 hard drive prep utils. A1200 only
U423 Sleepness Knights. Loads of 1200 utils
U439 AGA Lab V3.0 A1200 only
U380 AGA Icons. 1200/4000 only
U383 N-Comm V3.0 1200 only
U491 Video Tracker. AGA, only now you can make up them thar disco tapes
U373 More AGA Utils 18 LHZ Utils. DCopy 3.1/Filemaster/Virus Checker 6.33/Lo Res Brushes/AGA Test/Kill AGA/Disksalve/Alert Timer/& many more
U427 Workbench Screens A1200 only WB3. Workbench 3.0 Screens
U471 A1200 Hard drive prep utils A1200 only
U550 A/B Deluxe Paint 4 Tutorial (2 disks) ok A1200
U552 Diavold backup. Ok A500, A500+ & A1200. For hardrive backups supports tapestreamers
U553 Archivist V2.0. Ok A600, A500+ & A1200 ATA storage program ok A1200
U554 Execel, ok A500, A500+ & A1200. A card based database like Cardex. Ok all amigas

Disk Prices: 1 to 11 Disks £1.00p each
12 to 19 Disks .75p each
20 Plus 50p each

Payment to G.V.B-PD
Catalogue Disk. 3. 1st Stamps
ALL PRICES INC P&P

MINIMUM ORDER £5.00
NO HIDDEN EXTRAS

Send all orders to: G.V Broad Ent
Dept AUI FEB
43 Badger Close, Maidenhead.
Berkshire SL6 2TE
tele 01628 36020 6pm-7pm eves
01628 773149 10am-10.30 morns

5th Dimension Licenceware

Amos + Blitz programs required NOW

Special AUI offer Send a cheque or Postal Order for just £1.00 and receive our latest catalogue disk plus two exclusive 5DL game demos by return post. Don't forget to include a return address and your Amiga type. (Payable to 5DLicenceware)

Tel/Fax 01709 888127

Website http://www.ware5d.demon.co.uk
E-Mail - phil@ware5d.demon.co.uk

1 Lower Mill Close
Goldthorpe Rotherham
South Yorkshire S63 9BY

PD POWER

We stock over 10,000 disks

PD from only 25p

For FREE catalogue disk+
FREE game + FREE copier and more

Please SAE to PD POWER (DEPT AUI)
15 LOVETOT AVENUE
ASTON, SHEFFIELD S31 0BQ

Weddings ORIGINAL CLIP ART

NEW from *artworks*



- ***Over 100 original, full colour, fully scaleable 'vector' wedding images.***
- ***In Adobe Type 88 EPS format for Final Writer, Wordworth (not 3.1SE) and Pagestream etc.***
- ***Or in ProDraw format for ProPage, Pagesetter, ProDraw etc.***
- ***Also available for PCs.***
- ***Only £19.95***

Please make cheques/PO's payable to ARTWORKS
3 Pond Side, Wootton, Ulceby, Lincs. DN39 6SF
Telephone: 01469 588138

Access VISA MasterCard

Email: artworksuk@aol.com
ONLY AVAILABLE FROM ARTWORKS. NOT PUBLIC DOMAIN

CHROMA

DATACHROME

LOADS JPEGS GIFS PCX BMP TIFF & MORE
DIRECTLY INTO IFF-ONLY PACKAGES
DPAINT/FINAL COPY & WRITER/SCALA ETC
REQUIRES WB 3.0 & ABOVE - £29.99 (DEMO AVAILABLE)

NEW - DATACHROME GOLD

GIVE YOUR IFF-ONLY APPLICATIONS
DATATYPE SUPPORT - GRAPHICS AND SOUND FILES
LOAD & SAVE 24-BIT JPEGS FROM DPAINT !
DIRECTLY LOAD WAV & VOC SOUNDS
DIRECT CRUNCHED FILE LOADING & ARCHIVE FACILITIES
REQUIRES WB 3.0 & ABOVE - £49.99

WHAT ELSE DO WE SELL?

GENLOCKS (LOLA / RENDALE / AMITEK / G2)
LOLA L2000 – £349 L1500 – £175
WITH FREE VIDEO SOFTWARE ON REQUEST

A1200 RAM BOARDS & SIMMS
MAGNUM A1200 ACCELLERATORS
VIDI AMIGA 24 RT DIGITISERS
POWER COMPUTING PRODUCTS
COMPLETE AMIGA SYSTEMS (PACKAGE DISCOUNTS)

SYSTEM SETUP SERVICE/NEW USER SETUP – ASK

CHROMA
01328 862693
153 HOLT ROAD, FAKENHAM, NORFOLK NR21 8JF

ARENA

To have your company entry in the AUI Arena, telephone 0171-586-7717 or fax 0171-483-1774

Amiga User INTERNATIONAL

DELTRAX PD

Send 2x25p stamps for full catalogue to:
36 Bodelwyddan Ave,
Old Colwyn, Colwyn Bay, Clwyd LL29 9NP

FREE PD SOFTWARE

AMIGA – PC – All Computers
Call (0181) 651 5436 or
Write to 45 Brookscroft, Linton Glade, Croydon CR0 9NA
www.icpug.org.uk
Independent Computer Products Users Group

THE AMIGA USER CLUB

★ FREE PD!
★ Membership Discounts!
★ FREE MONTHLY Newsletter!
★ Special Offers!

Send SAE for details or telephone

EXAMPLE PRICES
Brilliance V2 ..... £61.99
Lightwave 3D £432.99
Citizen ABC Printer £144.00
Premier Manager 3 ..... £18.00
Sharp TV Monitor £162.00
PLUS MANY MORE!

We also supply Amiga Software/ Hardware to non members – telephone for details

The Amiga User Club
22 Heol Marlais
Llandybie
Ammanford
Dyfed SA18 3UY
Tel: 01269 851413

AT LAST
High Density Floppy Drives at an affordable price

2 Versions currently available:
External for any Amiga – £59.95
Internal for A4000 or towered Amiga – £44.95
Drives require KS2 or above
A600, 1200, 2000, 3000 internal versions available soon

ACE Computers
9 St. Nicholas Street, Bodmin, Cornwall PL31 1AA
Phone/Fax: 01208 79323

ASGARD SOFTWARE

THE BIG 100

YES! 100 Games on 7 Disks only £6 post free

Arcade/Puzzles/ Cards etc

ASGARD SOFTWARE
20 LANGDALE DRIVE
FLANSHAW, WAKEFIELD
TEL: 0924 363059 (24HRS)

Convert your Amstrad COLOUR MONITOR £10

	DIY	MADE
464/6128 (CTM 644/0) Picture only	£6	£10
464/6128 (CTM 644/0) inc Stereo Speakers	£31	£40
464.6128 PLUS (CM14) inc sound	£9	£15
464,6128 Green (GT-65) Pic Only	£6	£10

Dept AU **Hagars Electronics**
127 High Street, Sheerness, Kent
ME12 1UB
Tel: (01795) 663336
Money Back approval P&P inc
CQ/P.O./ACCESS/VISA/SWITCH
Delivery 2 days

SNAPPY PD

All disks 50p

For catalogue send first class stamp
80 Ottawa Road, Tilbury,
Essex RM18 7RH
(5D + Shoah Licenceware)

ZEN

COMPUTER SERVICES

Sales and Support for the pro-video user. After 20yrs in the TV industry and 7 yrs with *AMIGA*s, we can build, install, upgrade, and do most things with computer graphics and video systems.

"where computers and video come together"

Talk to us about Lightwave3D PAR, 24Bit Cards, Monitors, TVPaint, Wacom Tablets, SCSI Disks, DAT, CDROM, RAM, Scanners, Genlocks, Fonts, Subtitling, Prompting, Custom Programming, *(even Windows/NT/ PCs!)*

Tel/Fax 0161 793 1931
Compuserve 100046
36752 Silver Birch Grove, Swinton,
MANCHESTER, M27 5FZ

Amiga User INTERNATIONAL AMIGA ARENA

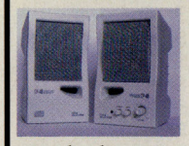
To have your company entry in the AUI Arena, telephone 0171-586-7717 or fax 0171-483-1774

Inkjet Refill kit for all leading printers with step by step instructions – **Colour £12.99** **Black £9.99**



Amiga – 15 way D socket VGA Adaptor **£10.99**

Active Multimedia Speakers 4W RMS 32W (PMPO) including Amiga adaptor lead **£19.99**



CD Rom Cleaner £8.99

Add £2.50 pp to all orders

CQ/PO/VISA/ACCESS to PHTV,
259 North Valley Rd., Colne, Lancashire BB8 9DR.
Send SAE for list.

Tel/Fax: 01282 864415

Computer Systems & Services

Amiga & PC Specialists

We offer a wide range of Amiga & PC Services

Amiga PD – over 6000 PD Titles – Prices 75p per disk + 50p P&P – Int floppy & PSU repairs, plus many other services provided, for free Cat Disk & information on other services. CALL

Computer Systems & Services
16 Elizabeth House, Durham Ave, Gidea Park, Romford, Essex RM2 6JU

Call 0976 232 939

Amiga Services & Information.
Please make Cheques & Postal Orders payable to M.J. Bixby.

PC REPAIRS & SERVICES

We also provide PC – Repair – Upgrades & Custom Building Services – for all you PC buffs, for more information call Louise 01708 709151.

PC ONLY



NO MERCY Software
Dept AUI/3
3 Hillside
Great Thirkleby, Thirsk
North Yorkshire YO7 2AX
Tel 01845 501326/526412

Phone 01845 501326 for a FREE Catalogue listing 15000 titles before 5pm and get it tomorrow

ORDER 18 DISKS AND REQUEST A FREE MOUSEMAT

GAMES
Megaball - *Brill Bat and Ball game. Very Good*
Monopoly - *board game, just like the real thing*
Scorched Tanks (wb2+) *excellent 2 player, 70 Weapons `inc*
Colonial Conquest II - *Text/gfx adventure*
Maniac Ball - *Bat and Ball with added difficulty - Get this now*
Deluxe Galaga 2.6 AGA or ECS (state) - *reviewed at 100%*
Cybersphere - *good bat and ball, lovely gfx and sound*
Kellogs Land (wb2+) - *Tony the tiger platform - GOOD*
Nesquick (wb2+) - *fantastic game, kids love it (german text)*
Torque - *87% review shoot em up - WOW*
Antz - *Fantastic lemmings type game, keeps you glued for weeks*
Cards and cash - *as it says*

ADULT TITLES (declaration of age required)
Strip Poker V3 - *beat the opponent and guess what?*
Lesbian Girls (wb2+)
Eurochicks Vol 1 (AGA) *5 disks of high quality girlie pics*
Horney Mouse (wb2+) *2 disks of pics*
Happiness is 4 fingers and . . . (AGA) *See for your self!!!*
Girlie Mpeg Movie (AGA) *short movie. Highly recommended*
Tetris Sex Special *Game with a sexual tone!!!*
Penthouse Hot Numbers (AGA, 6 disks) - *Get this now its fantastic*
Sexy Stars AGA - *All your fave stars in the errrrr flesh!*
Teenage Teasers vol 4 AGA - *Guess what's on these*
Showgirl anim 1 (2mb) - *from the recent movie!*
6th Form Lovers (wb2+) - more pics

UTILITIES
SoftMem - *software driven memory expansion (wb2+)*
Vark 15 AGA, 2 disks - *some very useful utils - GOOD*
A-START (MUI) - *Task bar like the Pee Cee - Good*
Star Trek NCC1701 Schematics, 2mb, data
anim - V. Good
Star Trek Ship Data - *loads of pics etc on ship data etc*
MUI 3.6 (3.7 soon) - *essential gui util, some programs need it*
Knack-(MUI), *fantastic compressor, PD of the month. ****
NewIcons 3.1 Wb3+ - *Wow these are brill new icons for Wb*

EDUCATION
Electronic Repairer (wb2, 4 disks), *fix loads of things with this set*
Dog Guide - *learn how to use the Amiga DOS with this tutor*
Beginners Guide (5 disks) - *Everything about the Amiga in plain English*
Guide 2 WB 3 - *Good insight into workbench 3*
Libs Guide (wb2+) - *whats that ith file do, here his wife tell you*
Error Guide (wb2+) - *Guru number information , good problem solver*
First Aid - *Learn the Basics, it could save a life*
Back 2 School (3 disks) - *3 disks for the kids, highly recommended*
Learn & Play 1 & 2 - *Another good kids collection*
Kids Only (wb2+) - *Demo of an excellent shareware disk, plenty to do*
French & German Tutors - *learn the Euro languages*



Some claim to be the best, they try to knock us! We see this as pure envy. Order your catalogue now and make up your own mind, then tell us we aren't the best!!

The Survivor. AMIGA

Greetings go out to: Malc Curling, Adrian Ritchings - get in touch soon, Mark Payne, Mr Slark, and all our other customers and friends

---

ADVERTISERS INDEX

Ace Computers 92-97
Active Software ... 67
AMG 2/3
Arrow PD 92-97
Artworks 92-97
Asgard Software 92-97
Bruce Smith Books . 92-97
Capri CD 92-97
Care Products 35
Chroma 92-97
Classic PD 92-97
Computer Systems . 92-97
Dart Computer Services 35
Direct Software 11/31
DTBS 92-97
Deltrax 92-97
Eyetech 21
First Computers .. 99
Future PD 92-97
Gasteiner 23
Golden Image 17
GVB PD 92-97
Hagars Electronics .. 92-97
HI-Q 25
ICPUG 92-97
Insanity 92-97
Kew II Collection 92-97
Kobrahsoft 92-97
Megatronix 27
On-line PD 35
PD Power 92-97
Pen Dragon 92-97
P.H.T.V. 92-97
Pixel Digital 92-97
Saddeness PD 85
Saddletramps PD 77
Shoah PD 92-97
Software City . 92-97
Underground PD 67
Weird Science 6/7
Wizard Development 19

Amiga User International

ON SALE: FIRST THURSDAY OF THE MONTH

Save me a copy of *AUI*, Mr. Newsagent!

In next month's issue: The latest developments on the Amiga **PLUS** NewsFile, PD Stakeout, Write to Reply, ***AUI*** Answers and much much more...

We know that sometimes readers have had difficulty finding ***AUI*** these days. You should be able to find ***AUI*** at the **WHSmith** following WHS retail shops. If not, please ask the store manager.

Abergavenny
Acocks Green
Aldershot
Alfreton
Altrincham
Andover
Arnold
Ashbourne
Ashford
Aylesbury
Banbury
Bangor
Barking
Barnet
Barnstaple
Barry
Basildon
Basingstoke
Bath
Beaconsfield
Beckenham
Bedford
Berkhamstead
Beverly
Bexhill
Bexleyheath
Bicester
Birkenhead
Birmingham
Bishop Auckland
Bishops Stortford
Blackburn
Blackpool
Blandford
Bletchley
Bognor
Bolton
Boscombe
Boston
Bournemouth
Bracknell
Braintree
Brecon
Brentwood
Bridgewater
Bridgnorth
Brighton
Bristol
Bromley
Bromsgrove
Burgess Hill
Burnley
Burton
Bury St Edmunds
Buxton
Caernarfon
Camberley
Cambourne
Cambridge
Canterbury
Cardiff
Cardigan
Carlisle
Carmarthen
Caterham
Catford
Chatham
Chelmsford
Cheltenham
Chester
Chichester
Chippenham
Chiswick
Chorley
Christchurch
Cirencester
Clifton
Colchester
Congleton
Coventry
Cowley
Crawley
Crewe
Croydon
Darlington
Dartford
Derby-Eagle Centre
Devizes
Diss
Doncaster
Dorchester
Dorking
Dover
Droitwich
Dudley
Durham
Ealing
EastGrinstead
EastRetford
Eastbourne
East Ham
Eastleigh
Elephant & Castle
Eltham
Enfield
Erdington
Evesham
Exeter
Exmouth
Falmouth
Fareham
Farnham
Finchley High Road
Fleet
Fleet Walk
Folkestone
Fulham
Gallowtree
Gillingham
Gloucester
Godalming
Golder's Green
Grantham
Gravesend
Great Yarmouth
Grimsby
Guildford
Halesowen
Hanley
Harborne
Harlow
Harpenden
Harrogate
Hartlepool
Hastings
Haverfordwest
Haywards Heath
Hemel Hempstead
Hempstead Valley
Henley
Hereford
High Wycombe
Hitchen
Holborn Circus
Horsham
Hounslow
Hove
Hull
Huntingdon
Huyton
Ilford
Ipswich
Kendal

John MENZIES

You should be able to find ***AUI*** at the following John Menzies retail shops. If not, please ask the store manager.

Aberdeen
Accrington
Alnwick
Argyle Street
Ashton
Aylesbury
Ayr
Banchory
Barnstaple
Barrow In Furness
Bath
Blyth
Bournemouth
Brentwood
Bridport
Burton On Trent
Bury St. Edmonds
Cardiff Queen Street
Chelmsford
Chesterfield
Cleveleys
Colchester
London, Covent Grdn
Cupar
Cwmbran
Dagenham
Dalkeith
Didcot
Dover
Droitwich
Dunfermline
East Kilbride
Eastbourne
Edinburgh
Elgin
Epsom
Falkirk
Galashiels
Glasgow
Glenrothes
Gosforth
Grays
Greenock
Gyle
Hamilton
Havant
Hawick
Headington
Helensburgh
Hereford
Hinkley
Inverness
Irvine
Kilmarnock
Kirkcaldy
Lanark
Livingston
Lowestoft
Maldon
Mansfield
Middleton
Motherwell
Neeston
Oban
Paisley
Perth
Peterborough
Peterhead
Poole
Poulton
Reading Station
Rugby
Runcorn
Salford
St. Andrews
St. Annes On Sea
Staines
Stirling
Stone
Stourbridge
Stretford
Sudbury
Swansea
Walsall
Warwick
Wellington
Weymouth
Wickford
Wigan
Wimbourne
Wrexham

Kensington
Keswick
Kettering
Kidderminster
Kilburn
Kings Heath
Kings Lynn
Kingston
Kingsway
Kingswood
Lakeside W. Thurrock
Lancaster
Launceston
Leamington
Leeds
Leighton Buzzard
Letchworth
Lewisham
Lichfield
Lincoln
Liverpool
Llandudno
Llanelli
Long Eaton
Loughborough
Lowestoft
Luton
Macclesfield
Maidenhead
Maidstone
Margate
Market Harborough
Marlborough
Marlow
Marmesbury
Melton Mowbury
Merthyr
Milton Keynes
Minehead
Monmouth
Mosley Hill
Muswell Hill
Nantwich
Neath
New Malden
Newark
Newbury
Newcastle
Newmarket
Newport
Newquay
Newton Abbot
North Finchley
Northampton
Northfield
Northwich
Norwich
Nuneaton
Oldham
Ormskirk
Orpington
Oswestry
Oxford
Oxford Street-London
Paignton
Peckham
Penarth
Penrith
Penzance
Peterborough
Plymouth
Pontypridd
Poole
Portsmouth
Preston
Putney
Radlet
Ramsgate
Reading
Redcar
Redditch
Redhill
Rhyl
Richmond
Rickmansworth
Ripon
Rochdale
Romford
Romsey
Ross
Rugby
Ruislip
Rushden
Saffron Walden
Sale
Salisbury
Scarbrough
Sevenoaks
Shaftsbury
Shrewsbury
Sittingbourne
Skegness
Slough
Solihull
South Hampstead
South Shields
Southampton
Southend On Sea
Southport
Southsea
Spalding
St.Austell
St.Albans
St.Helens
Stafford
Staines
Stamford
Stevenage
Stockport
Stockton
Stoke On Trent
Stratford
Stratham
Stroud
Surrey Docks
Sutton
Sutton Coldfield
Swansea
Swindon
Tamworth
Taunton
Tavistock
Teignmouth
Telford
Tenby
Tewkesbury
Tonbridge
Torquay
Trowbridge
Truro
Tunbridge Wells
Uxbridge
Victoria
Wallington
Walsall
Walton On Thames
Wandsworth
Warrington
Watford
Watford(Harlequin)
Welshpool
Welwyn Garden City
West Bromwich
West Ealing
West Wickham
Weston Favell
Weston-Super-Mare
Weybridge
Weymouth
Whitchurch
Whitehaven
Widnes
Wigan
Wilmslow
Wimbledon
Winchester
Windsor
Wisbech
Witney
Wokingham
Wolverhampton
Woodgreen
Woolwich
Worcester
Worthing
Wrexham
Yeovil
York

Don't forget that you can order your copy of *AUI* through your local newsagent.

RESERVE YOUR COPY TODAY!

Complete this form and hand it to your local newsagent.

Please reserve/deliver* *Amiga User International* on a regular basis, commencing with the next issue, until further notice.

Name _____

Address _____

_____

_____

_____

Signed _____ **Date** _____

*Delete as appropriate

Distributed to the newstrade by COMAG MAGAZINE MARKETING

RS McCOLL MARTIN the newsagent DILLONS FORBUOYS THE NEWSAGENT Supercigs

Late Night Opening Wednesday & Thursday till 7.30pm

Open Sunday 11am to 4pm

FIRST COMPUTER CENTRE

LOW COST DELIVERY

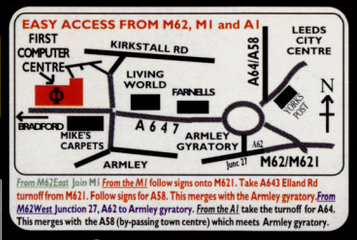
- 2-4 Week Days £3.99
- Next Week Day £5.99
- Saturday Delivery £15.00

Delivery subject to stock availability

Lombard Finance

SHOWROOM ADDRESS:
FIRST COMPUTER CENTRE,
DEPT. AUI, UNIT 3, ARMLEY PARK CT,
STANNINGLEY RD, LEEDS, LS12 2AE.

Tel: 0113 231-9444





Please allow 5 working days for cheque clearance. Prices are correct at the time of going to press. Please check our latest prices before ordering. All sales are subject to our standard terms & conditions (copy available upon request). E&OE.

SWITCH VISA DELTA MasterCard

E-Mail: sales@firstcom.demon.co.uk WEB: www.firstcom.demon.co.uk FAX:0113 231-9191 BBS:0113 231-1422

Hardware

Amiga A1200 MagicPack



Includes, Wordworth V4SE, Datastore, Organiser, Turbocalc 3.5, Personal Paint V6.4, Photogenics 1.2SE, Pinball Mania & Whizz.

Very limited Stocks Early, Purchase Recommended.

£379.99

Amiga A1200 Magic Pack Inc.170Mb HD & Scala MM300

Includes same software pack as Magic Pack, But also includes Scala MM300(Req. 4Mb).

£479.99

AMIGA *M1438S* Monitor *£259.99 When bought with a computer

First Starter Pack

- A1200 dust cover
- 10 x DSDD disks + labels
- Top quality joystick
- Deluxe mouse mat
- 3 x A1200 games

All for only **£19.99**

Software Specials

- Vista Pro Lite full ver. £9.99
- Wordworth V £9.99
- Deluxe Paint IV AGA £9.99
- Blitz Basic 2.1 £29.99
- Technosound Turbo II £29.99
- Final Writer 5 £74.95

RAM Expansion

LOWEST PRICES EVER!!

A1200 1 MB RAM	£59.99
A1200 2 MB RAM	£69.99
A1200 4 MB RAM	£76.99
A1200 8 MB RAM	£93.99
For 68882 33Mhz Co Pro add	£35.00
PRIMA A500 512k RAM no clock	£19.99
PRIMA A500+ 1 Mb RAM	£29.99
PRIMA A600 1 Mb RAM no clock	£29.99

MASSIVE REDUCTIONS

1 Mb 72 Pin SIMM	£10.99
2 Mb 72 Pin SIMM	£14.99
4 Mb 72 Pin SIMM	£15.99
8 Mb 72 Pin SIMM	£30.99
16 Mb 72 pin SIMM	£75.99
1 Mb 30 pin SIMM	£10.99
4 Mb 30 pin SIMM	£29.99
256 by 4 DRAM (DILs)	(each)£4.99
256 by 4 ZIPPS	(each)£6.99

Part exchange available on your old memory, Call for pricing.

Accelerator Cards

Viper II-33	£129.99
Blizzard 1230-50	£159.99
Blizzard 1260-50	£579.99

CD ROM Drives/Squirrel I/face

Ultra CD ROM Drives



New!!

Ultra 6 Speed IDE £189.99
Ultra Drive Kit £119.99

Squirrel SCSI-II Interface*£45.00

*When bought with any SCSI device, £54.95 if bought separate

Surf Squirrel SCSI-II Interface *£79.99

*When bought with any modem or SCSI device £99.95 if bought separate

Octagon/GVP SCSI Card £99.99

SCSI-II interface card for big box Amiga's A4000/2000 etc.



£139.99 4 X Speed

External SCSI CD ROM Drives

* SCSI Controller required to run CD Drives.*

Internal SCSI CD ROM drives

Sanyo CRD254V x 4 Speed	£89.99
Teac CD56S x 6 Speed	£121.99
Toshiba 5701 x 12 Speed	£149.99

Amiga Technologies Q-Drive CD/ROM

Fits via PCMCIA Slot



New!!

4X Speed Only....£149.99

PRIMA SCSI Enclosures
Single Case £69.99 Dual Case £119.99

Hard Drives

3.5" Hard Disk Drives

IDE	SCSI
540Mb..£117.99	270Mb.....£99.99
850Mb..£133.99	540Mb.....£149.99
1.08Gig.£160.99	1.8Gig.....£235.99
2.1Gig...£229.99	2.1Gig.....£345.99
3.2Gig...£299.99	4.3Gig.....£797.99

Build Your Own SCSI Hard Drive

- SCSI case with built in PSU £69.99
- SCSI Hard Drive, Select from above
- SCSI Squirrel Interface £45.00
- 12 Month Warranty.

2.5" Hard Drives for A600/A1200 with installation kit

inc. software, screws, cables and instructions

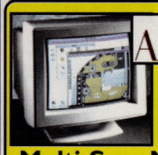
Seagate FUJITSU CONNER

80Mb....£64.99	130Mb....£80.99
170Mb....£85.99	250Mb..£119.99
340Mb..£129.99	540Mb..£139.99
810.....£149.99	1.0Gig..£189.99

3.5" Hard Drive Install Kit £19.99

Includes set up software, cables and full instructions, no Hard Drive.

Monitors



AMIGA

New Amiga Monitors

Multi-Sync Monitors

14" 1438s.....£269.99
14" Monitor Includes Built In Speakers
17" 1764.....£579.99
17" 1701.....£529.99

Disk Drives



Zip

- Includes:-
- 1 X 100Mb cartridge
- SCSI i/face & adaptor may be req. at an extra cost.

£151.99

Zip Tools Driver Software Suits Zip & Jazz Drives.....£16.99

Amiga External drive £44.99
Amitek 1.76Mb Ext. £69.99
A1200/600 internal drive £39.99
A500/500+ Internal drive £39.99

Peripherals

Mega Mouse+ 400 dpi (3 button)	£12.99
Mega Mouse 400 dpi (2 button)	£11.49
Amiga Mouse 560dpi (3 button)	£12.49
Quality Mousemat (4mm)	£3.99
Golden Image Am/ST Trackball	£17.99
ZyFi-2 Speakers (8 watts/channel)	£26.99
ZyFi Pro Speakers (16 watts/channel)	£57.99
Roboshift (Auto mouse/J.stick switch)	£9.99
Kickstart 2.04/2.05 (for use in A600)	£24.99
CIA 8520A I/O controller	£18.99
68882 Co Pro 25mhz PLCC	£29.99
68882 Co Pro 33mhz PLCC	£34.99
Zipstick Joystick	£11.99
Saitek Megagrip II	£12.99
Amiga Modulator	£34.99
Amiga PSU	£34.99

Turbotech realtime clock cartridge £14.99.....fits any Amiga

SupraFAXModem Modems — US Robotics

Sportster Vi



- Class 1 Fax
- Personal Voice Mail
- Fax on Demand
- Call Discrimination
- BABT Approved
- 14,400 Data/14,400 Fax....£85.99
- 33,600 Data/14,400 Fax..£161.99

Amiga SurfWare Software Pack

The complete software suit for all your Modem needs.

- Net Software
- Web Browser
- E-mail
- IRC....Only

£29.99

GP Fax Software..only £44.99

Full Send and Receive Fax Software for Amiga Computers with a Fax/Data Modem.

IBrowse Web Browser £24.99

PRIMA V34+ Fax Modem

Amazing Price/Performance

- 33.6 Baud Rate
- Class 1 Fax
- BABT & CE approved.

Only..£119.99

Complete with cables & Amiga N-comm Software

Bargains

V32Bis 14,400 Fax Modem £49.99
V22Bis 2400/9600 Modem £24.99

Amiga SurfWare bundle when purchased with any Modem only...£19.99

Modem Accessories

Phone Line Extension Cables...
5M. £6.99 10M. £8.99 15M. £10.99
Dual Socket Adaptor.....£6.99

Miscellaneous

PRIMA The Prima ATOM

Heavy Duty PSU £69.99

- High Quality 200 Watt PSU.
- Colour Co-Ordinated Casing.
- 4 x The Power of Std. Amiga PSU
- 12 Month Warranty.

Pro-GRAB SVHS 24RT Plus

Pro-GRAB Only...£129.99
24 R/T PCMCIA adaptor £39.99

Power Scan v4. £89.99
256 g/scale on AGA Amigas, 64 g/scale non AGA

Power Scan Col. £174.99
24 bit colour scanner, 16.7 million colours

We also carry a wide range of cables & adaptors in stock.....Call

CD ROM Software

Delivery £1.50 per title or £3.99 for 4+

1078 Weird Textures	£12.99	Epic Collection 2	£17.99
17Bit & LSD Vol. 1/2/3	£17.99	Epic Int. Encyclopedia	£25.99
17Bit Collection	£10.99	Euro CD v1	£12.99
17Bit Continuation	£14.99	Geek Gadgets	£17.99
17Bit Phase 4	£6.99	GIF Sensations 2	£17.99
17Bit 5th Dimension	£17.99	Giga Graphics 4	£28.99
3000 JPEG Textures	£12.99	Global Amiga Exprnce.	£17.99
3D Images/Objects	£8.99	Graphics Sensations 1	£17.99
AGA Experience 1 NFA	£12.99	Guinness Disc of Rec.	£17.99
AGA Experience 2 NFA	£12.99	Horror Sensations (18)	£17.99
AGA Toolkit 97	£8.99	Hottest 6	£17.99
Amiga Desktop Video 2	£12.99	Into-the-Net	£17.99
Amiga Developers CD	£12.99	Insight Dinosaurs	£4.99
Amiga Repair Kit	£39.99	Learning Curve	£17.99
AmiNet 12/13/14/15/16/17	£12.99	Light ROM 4	£24.99
AmiNet Set 1/2	£23.99	Light ROM Gold	£17.99
AmiNet Set 3	£26.99	LSD Compendiium 3	£17.99
Arcade Classics Plus	£12.99	Magic Publisher	£39.99
Artworx	£8.99	Magic WB Enhancer	£8.99
Assassins CD Vol. 3	£17.99	Meeting Pearls v4	£8.99
C64 Sensations v2	£16.99	Movie Maker Special FX	£17.99
Card Games CD	£12.99	Multimedia Toolkit 1+2	£17.99
CD-PD 1/2/3	£5.99	Multimedia Backdrops	£17.99
Dem Rom	£12.99	Network 2 CD	£12.99
Demo Collection v1	£5.99	Network 2 + CD32 Cable	£33.99
Emulators Unlimited	£17.99	Nothing but GIFs AGA	£17.99
Encounters	£12.99	Nothing but Tetris	£9.99
Octamed 6 & Sounds Terr.	£17.99		
Octamed Sound Studio	£22.99		
Oh Yes More Worms	£8.99		
Photogenics 2	£89.99		
Prima Shareware 1 CD	£9.99		
Pov-Roy	£22.99		
Retro Gold CD	£17.99		
Scene Storm	£17.99		
Sci-Fi Sensation 2	£17.99		
Software 2000 2CD	£26.99		
Sound FX Sensation	£12.99		
Source Code	£17.99		
Space & Astronomy	£18.99		
Space Shuttle Encyclopedia	£24.99		
System Booster	£17.99		
The Colour Library	£8.99		
The Spectrum CD 96	£16.99		
The Personal Suite	£17.99		
Utilities 2 (PDSoft)	£17.99		
Utilities Experience	£13.99		
Weird Sc. AMOS PD	£16.99		
Weird Sc. Clip Art	£8.99		
Weird Sc. UPD Gold	£17.99		
Workbench Add-Ons	£20.99		
World Atlas	£24.99		
World Info 95	£17.99		
Zoom 2	£18.99		

FREE!! Prima Shareware CD-ROM worth £10 with every order of CD-ROM software over £30

Printers/Flatbed Scanners

Canon

Canon BJ30	£159.99
Portable mono printer, 30 page ASF built in.	
Canon BJC70Colour	£185.99
Portable colour printer, 30 page ASF.	
Canon BJ240C	£190.99
Colour Printer,720 dpi.	
Canon BJC4100	£209.99
Quality colour/fast mono printing, 720x360 dpi.	
Canon BJC4200	£254.99
New version, with Photo Realism Cart. Option	
Canon BJC4550	£369.99
A3 version, with Photo Realism Cart. Option	
Canon BJC620	£348.99
Enhanced colour printer, virtual 720 dpi.	

CITIZEN COMPUTER PRINTERS

ABC Colour printer	£129.99
Simple (as easy as ABC) to use 24 pin printer. Comes as standard with 50 sheet Auto sheet feeder. Tractor feed optional at £34.99	
Citizen Projet-IIc	£164.99
Colour Inkjet, 300x300 dpi, 70 sheet ASF	
Citizen Printiva 600c	£379.99
600 dpi colour, 1200 dpi mono printer, Use's New Advanced Micro Dry print Technology.	

EPSON

Stylus 500 Colour	£249.99
720 dpi, 4ppm Black, 2ppm Colour.	
Stylus 200 Colour	£179.99
720dpi, 2.5ppm Black, 1ppm Colour.	
Stylus 200	£139.99
720 dpi, 2.5ppm Black	
Epson GT-5000 Scanner	£329.99
Entry level A4 Colour Flatbed Scanner.	
Epson GT-8500	£450.99
400dpi Fully featured A4 Colour Flatbed Scanner	
Amiga Scanning S.ware	£59.99

HEWLETT PACKARD

HP340 Colour Portable	£179.99
Full Colour, 600x300 dpi Mono, 300x300dpi Col.	
HP400Colour	£154.99
Full Colour, 600x300 dpiMono, 300x300 dpi Col.	
HP 690/693Col.	£249.99/£269.99
300x300 dpi Colour Printing, now even faster.	
HP870 Colour	£395.99
600x600 dpi up to 6 p/p/m mono, 3p/p/m colour	
HP 5L Laser printer	£339.99
4 p/p/m, 600 dpi, 1Mb of Ram.	
HP 6P Laser printer	£569.99
8 p/p/m 600 dpi, 2Mb of Ram.	

ACCESSORIES

Printer Switch Box 2 way	£12.99
Printer Switch Box 3 way	£17.99
1.8 Metre printer cable	£4.99
3 Metre printer cable	£6.99
5 Metre printer cable	£8.99
10 Metre printer cable	£12.99
Epson 200 8 Hr. Warranty	£46.99
Epson 500 8 Hr. Warranty	£75.99
Epson Iron-On Transfer Paper	£12.99
Epson 720 dpi Paper Pack	£12.99
Canon T-Shirt Transfer Pack	£POA
Canon BC-06 Photo Cart.	£24.99
Canon BC-09 Fluorescent	£24.99
Canon BC-22 Photo Kit	£37.99
Canon BC-29 Fluorescent	£32.99
Canon Bubble Jet Paper	£14.99
HP DJ690 Photo Cartridge	£29.99
HP Photography Paper	£9.99
HP Banner Paper	£9.99
HP Deskjet Paper Pack (500)	£10.99
HP Premium Glossy Paper (10)	£9.99

Studio 2 *New version* 2.13b

"If you want to get the best possible results from your printer, get a copy of Studio".

£49.99 or £44.99 when purchased with a Printer.

Consumables

Ribbons

Citizen Swift/ABC mono	£3.99
Citizen Swift/ABC colour	£12.99
Star LC90 mono ribbon	£4.99
Star LC10/100 mono	£3.69
Star LC10/100 colour	£7.99
Star LC240c colour	£13.99
Star LC240c mono	£8.99
Star LC240 mono	£5.99
Star LC24-10/200/300 Colour	£13.99
Re-Ink Spray for mono ribbons	£11.99

PREMIER-INK Cartridge Refills

Save a fortune in running costs with your ink/bubble jet. Compatible with the HP Deskjet series, Canon BJ10/20/80/130/200/300/330, Star SJ48, Citizen Projet and many others.

Single refills	(22ml)	£6.99
Twin refills	(44ml)	£12.99
Three colour kit	(66ml)	£19.99
Full colour kit	(88ml)	£27.99
Bulk refills	(125ml)	£24.99

Laser Printer Supplies

Hewlett Packard Laserjet 5L	£65.99
Hewlett Packard Laserjet 5P	£75.99
Hewlett Packard Laserjet 4L	£68.99
H. Packard L.jet 4/M/5/M/N	£99.99
Canon LPB-460 Toner	£79.99

Laser printer supplies for major manufacturers available.....Call.

Ink Cartridges

Canon BJ10/Star SJ48	£17.99
Canon BJ200/230	£18.99
Canon BJ30 (3 pack)	£12.99
Canon BJC 70 mono (3 pack)	£10.99
Canon BJC 70 colour (3 pack)	£17.99
Canon BJC 4000 colour (single)	£16.99
Canon BJC 4000 mono (single)	£6.99
Canon BJC 4000 mono high cap.	£28.99
Canon BJC 600e mono/col.	£8.99/£7.99
Citizen Printiva mono/col.	£5.99
HP. Deskjet 340 mono	£21.95
HP.Deskjet 500 mono/col.	£22.99/£24.99
HP. Deskjet 660 mono/col.	£23.99/£25.99
HP. Deskjet 850C mono/col.	£27.49/£28.99
Epson Stylus mono/col.	£13.99/£27.99
Epson Stylus Col. IIs mono/col.	£17.99/£24.99
Epson Stylus 500 mono/col.	£16.99/£24.99
Star SJ144 mono/colour (single)	£7.99
Printer Dust Covers	£5.99

Paper

Fanfold (tractor feed) 500 sheets	£6.99
Fanfold (tractor feed) 1000 sheets	£12.49
Fanfold (tractor feed) 2000 sheets	£21.49
Single sheet 500 sheets	£6.99
Single sheet 1000 sheets	£12.49
Single sheet 2000 sheets	£21.49
Epson Stylus 720 dpi paper pack	£13.99
H.Packard Glossy paper pack (10)	£9.99
High quality Inkjet Paper (500)	£10.99

Disks



Bulk DSDD

10 x £3.49	100 x £26.99
30 x £9.99	200 x £49.99
50 x £14.99	500 x £114.99

Branded DSDD

10 x £4.99	100 x £41.99
30 x £13.99	200 x £76.99
50 x £21.99	500 x £175.99

Bulk DSHD

10 x £3.99	100 x £29.99
30 x £10.99	200 x £55.99
50 x £16.99	500 x £129.99

Branded DSHD

10 x £5.99	100 x £44.99
30 x £15.99	200 x £82.99
50 x £23.99	500 x £189.99

Disk labels x500 £6.99
Disk labels x1000 £9.99



IT'S BACK!

even bigger and better this year

So On With The Show

ALL the exciting new releases from the leading Amiga developers

- ★ Save £100's On Special Offers
- ★ ICPUG Free Advice Centre
- ★ Internet Village
- ★ High End Applications
- ★ Presentation Theatre

Novotel Exhibition Centre, Hammersmith, London

Saturday, May 17th 10am - 5pm and Sunday, May 18th 10am - 4pm

Avoid the queues by booking in advance Credit Card Hotline **01369 707766**

Cheques and Postal Orders made payable to The World of Amiga at PO BOX 9, Dunoon, Argyll. PA23 8QQ

Admission: Adults £8 Children £6